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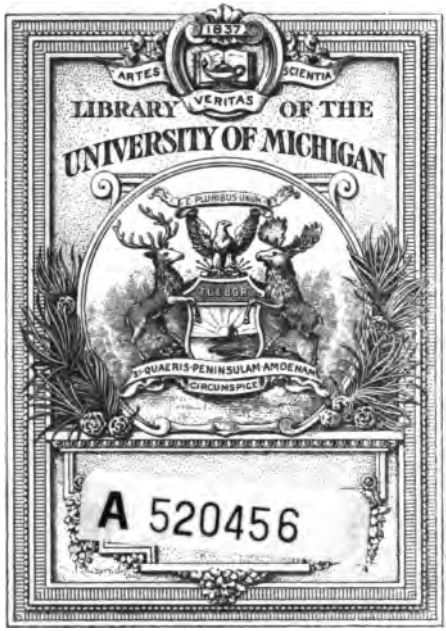
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TREATISE

OF

MECHANICS,

THEORETICAL, PRACTICAL,

AND

DESCRIPTIVE.

Gilbert

By OLINTHUS GREGORY, LL.D.

Corresponding Associate of the Academy of Dijon; Honorary Member of the Literary and Philosophical Society of New York; of the New York Historical Society; of the Literary and Philosophical, and the Antiquarian Societies of Newcastle-upon-Tyne; of the Cambridge Philosophical Society; of the Institution of Civil Engineers, &c. &c. Secretary to the Astronomical Society of London, and Professor of Mathematics in the Royal Military Academy.

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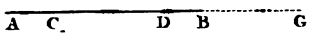

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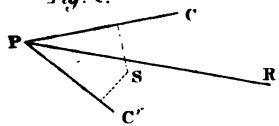

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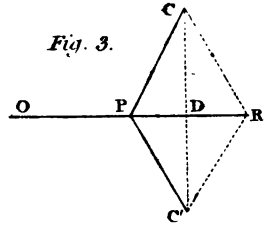

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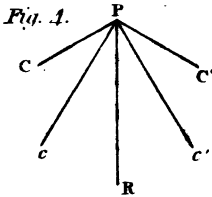

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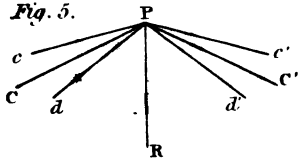

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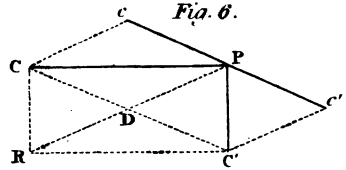

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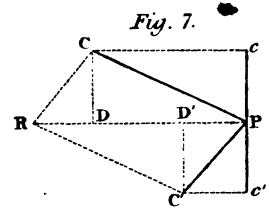

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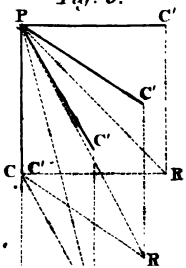

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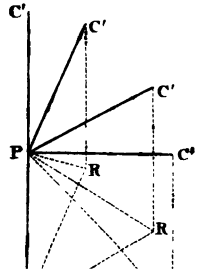

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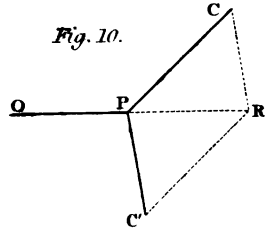

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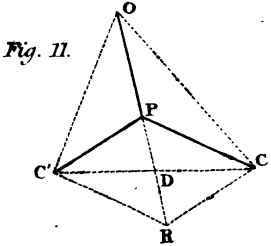

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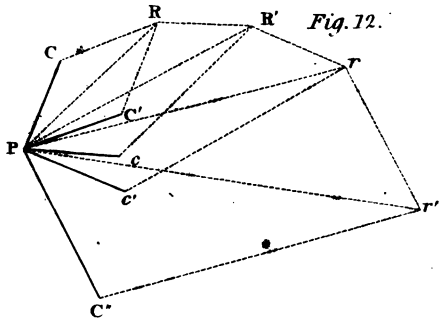

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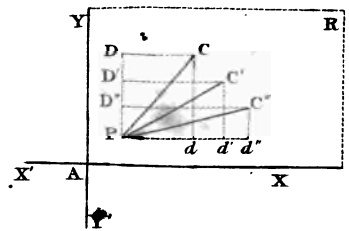

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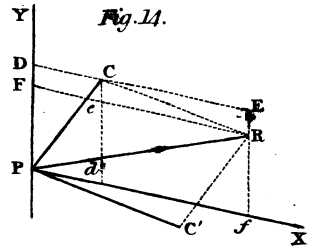

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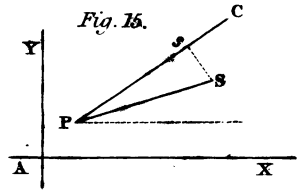

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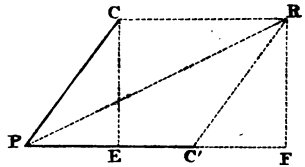

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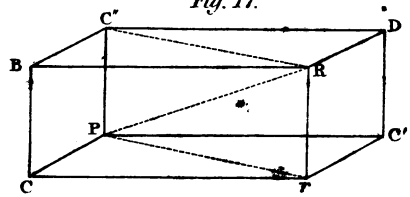

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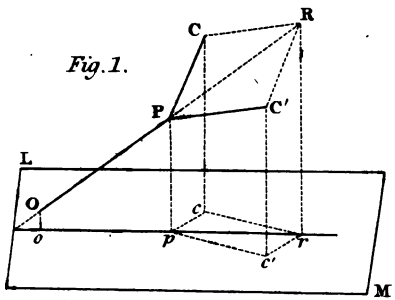

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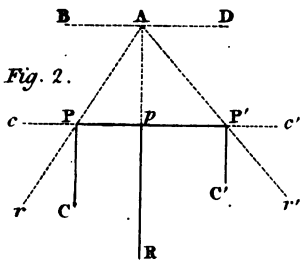

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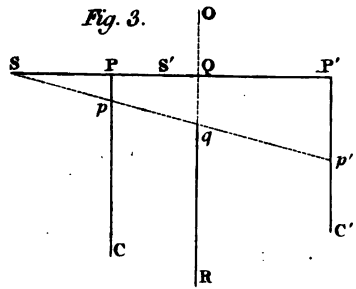

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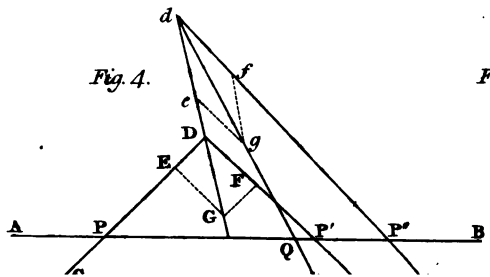

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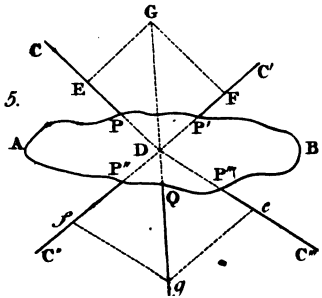

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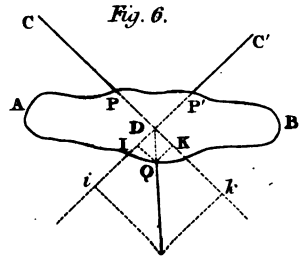

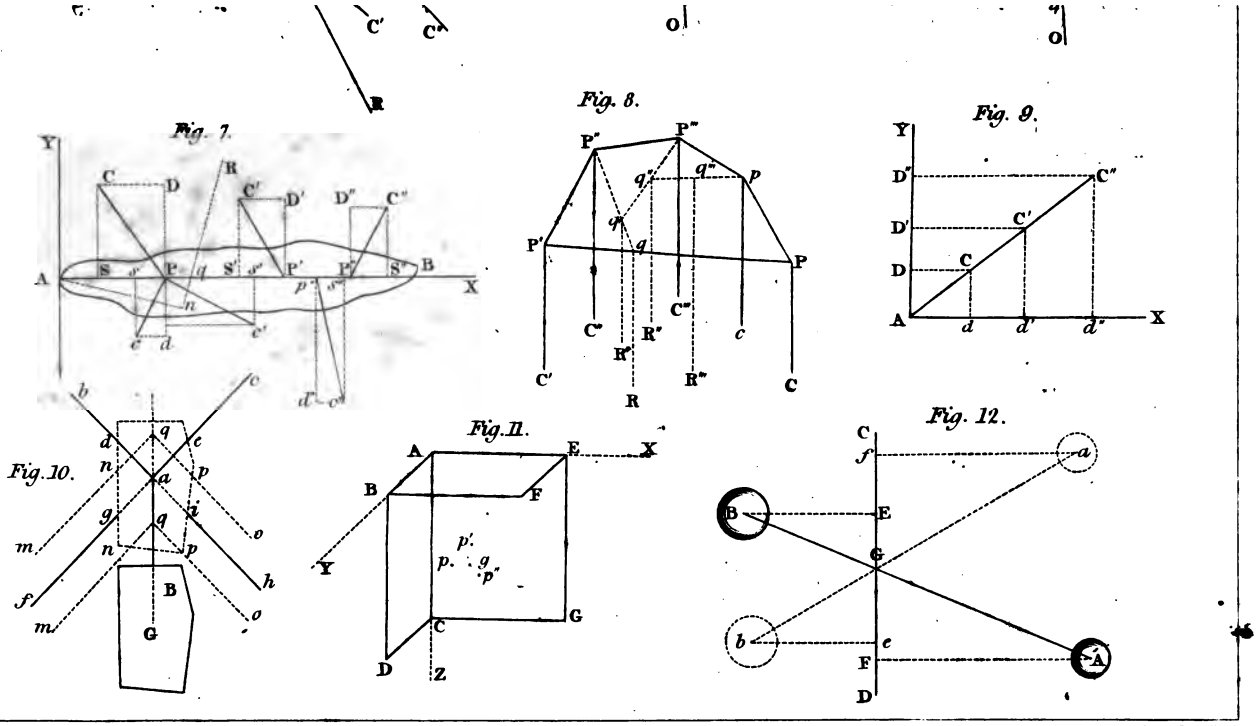
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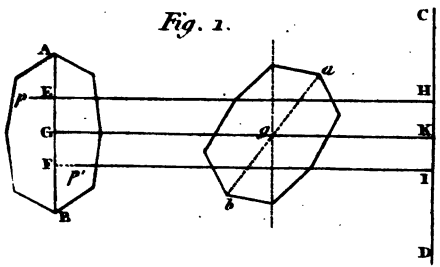

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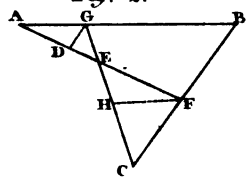

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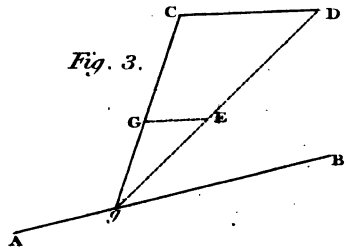

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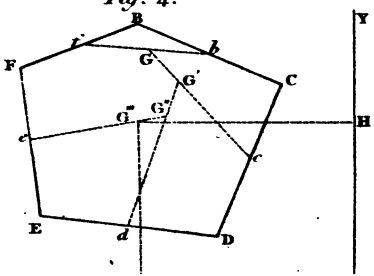

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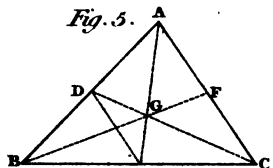

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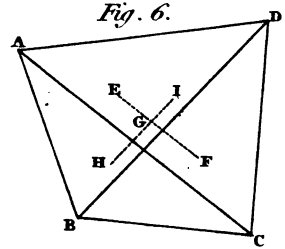

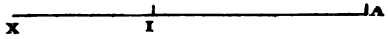

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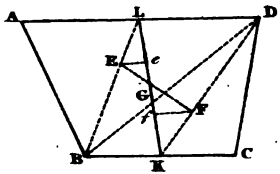

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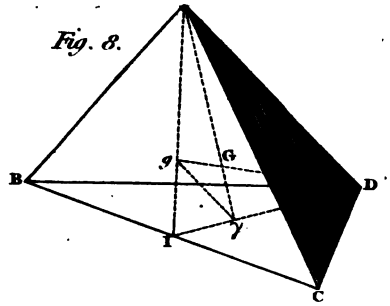

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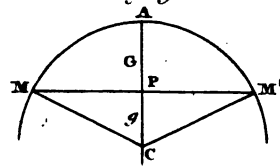

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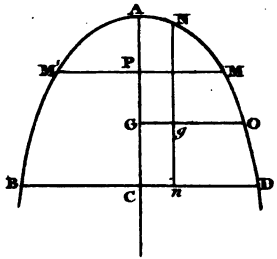

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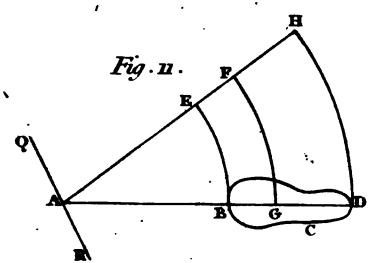

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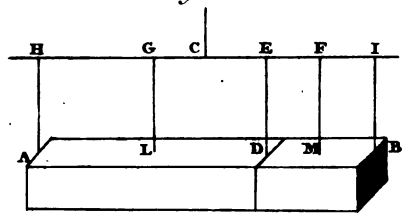

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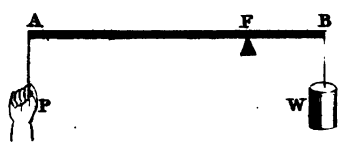

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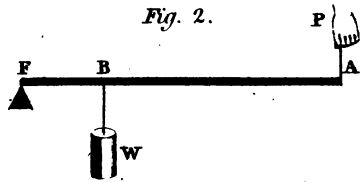

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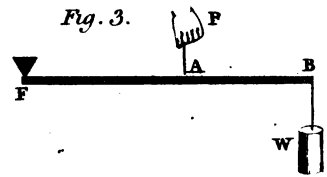

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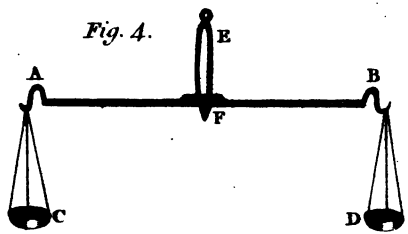

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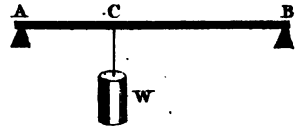

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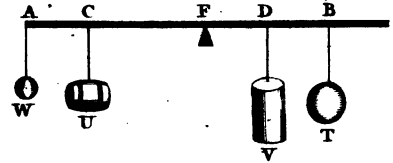

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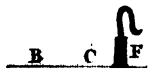

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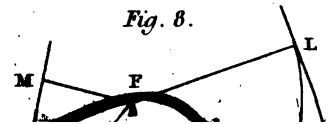

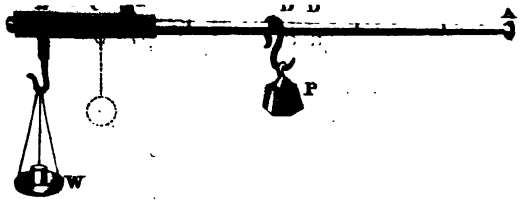

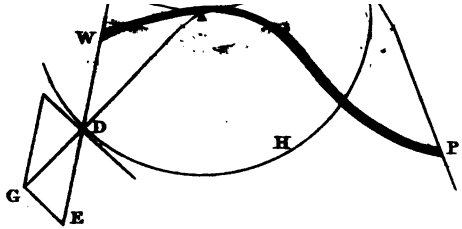

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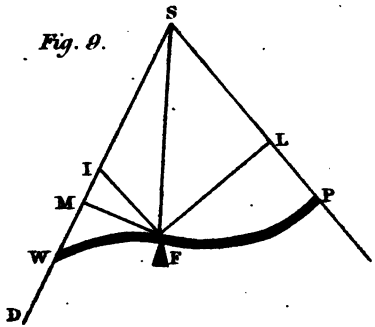

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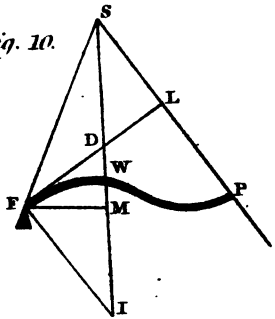

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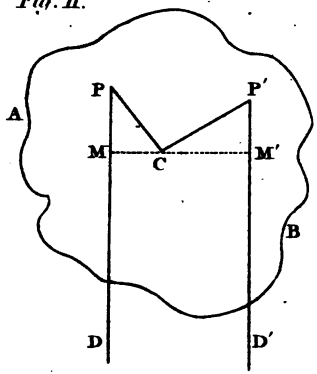

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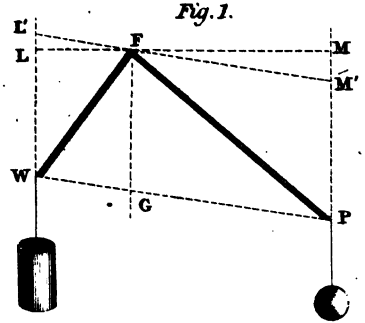

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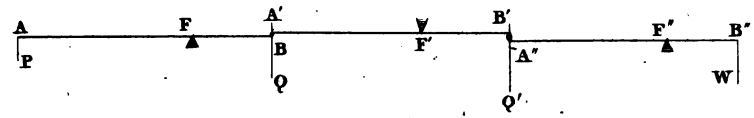

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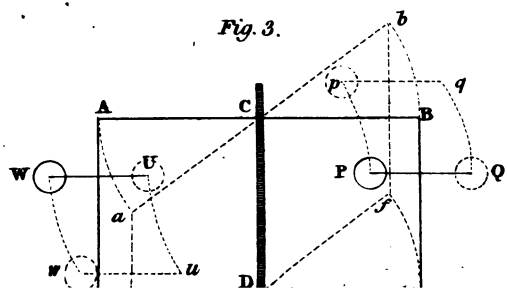

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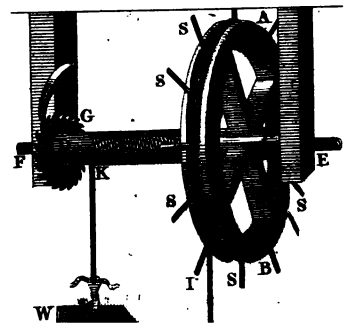

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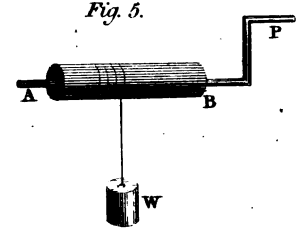

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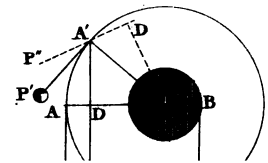

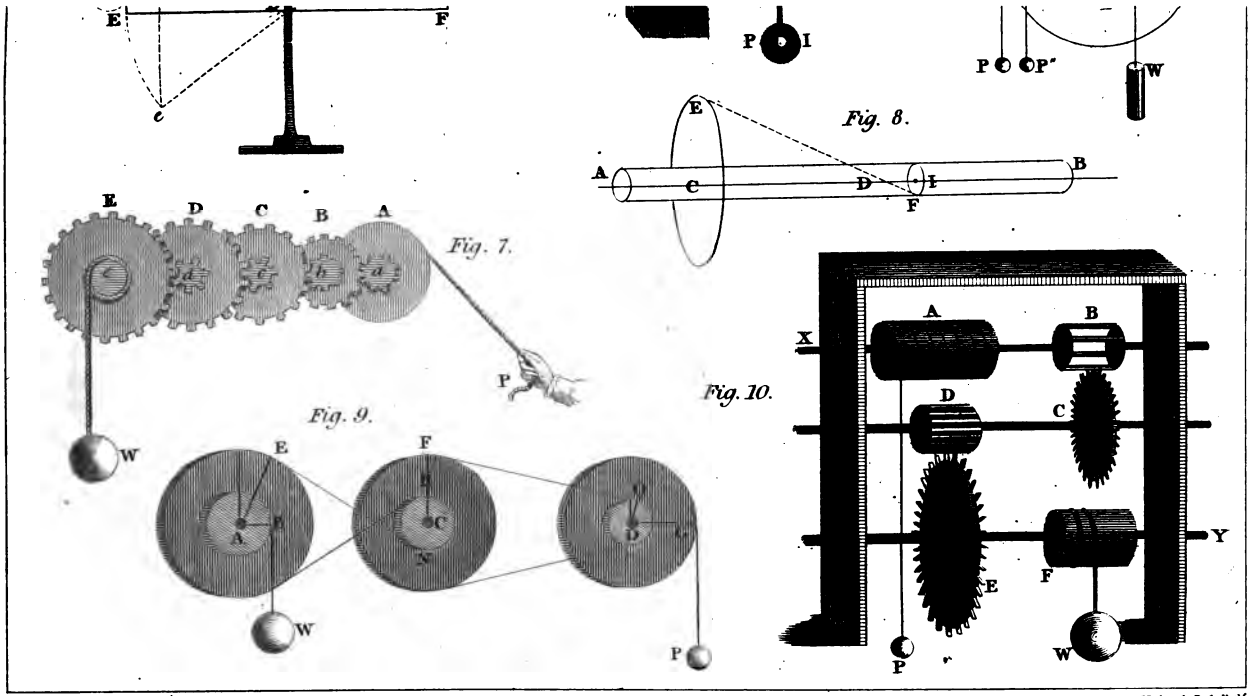
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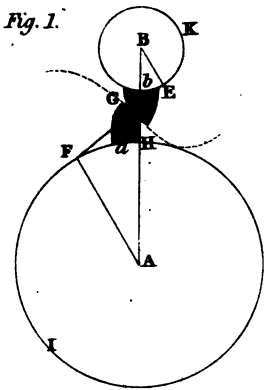

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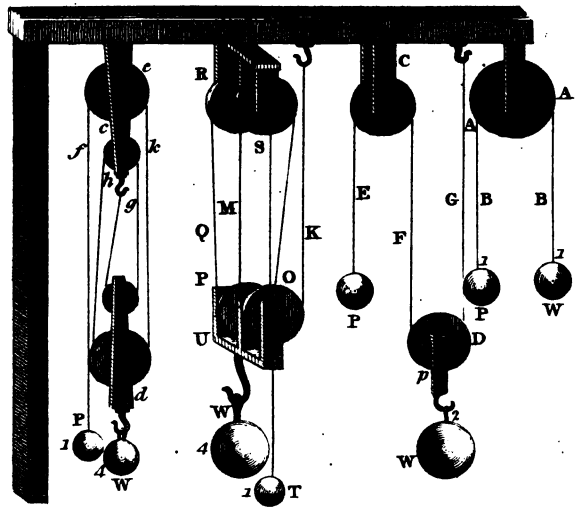

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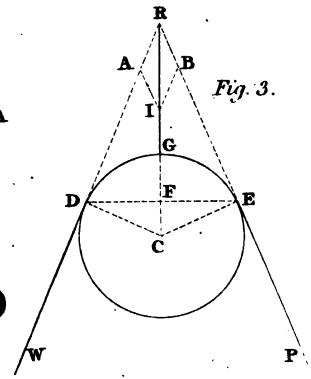

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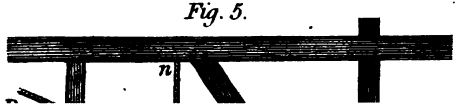

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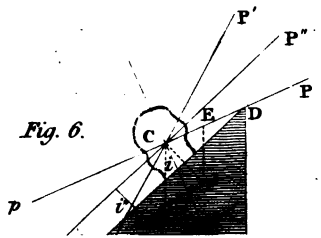

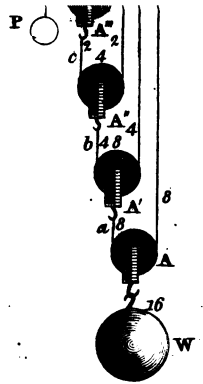

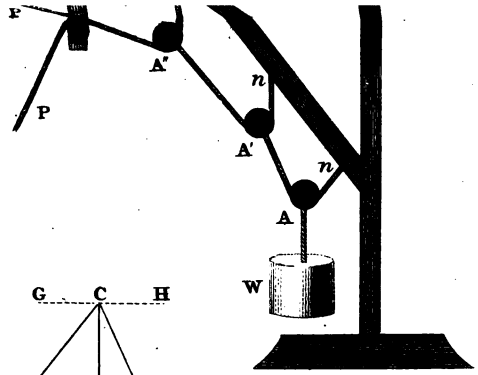

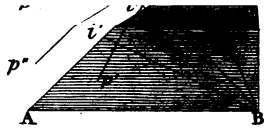

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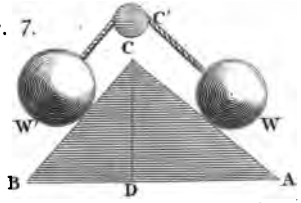

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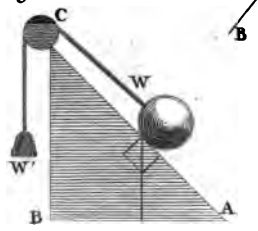

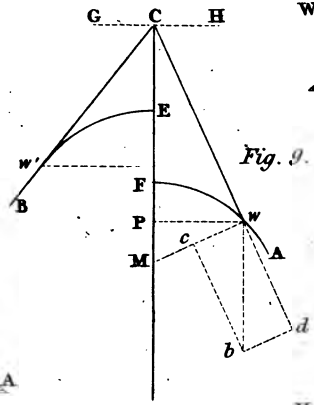

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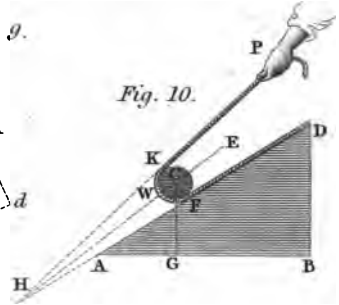

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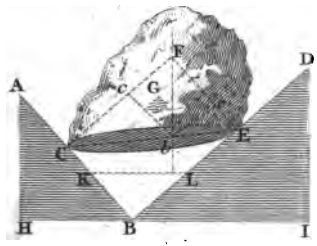

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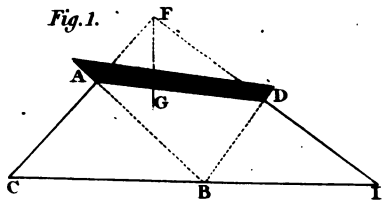

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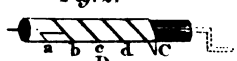

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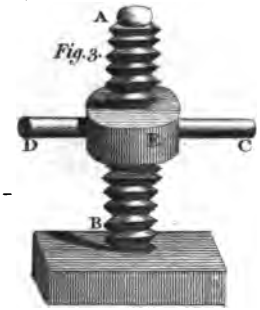

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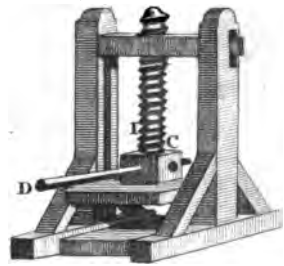

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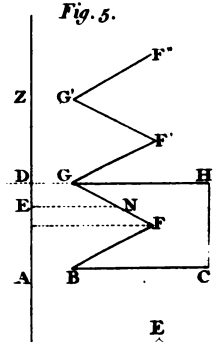

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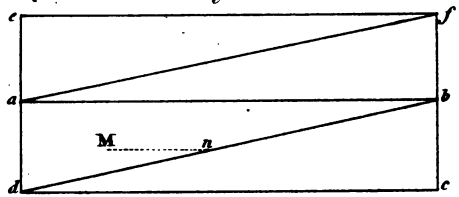

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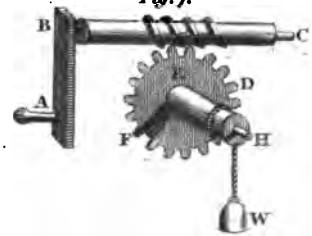

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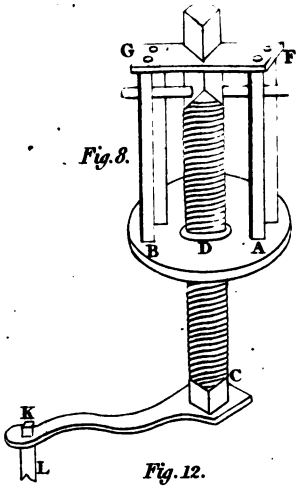

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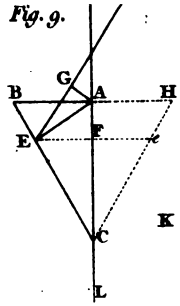

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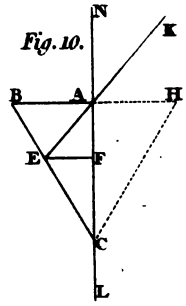

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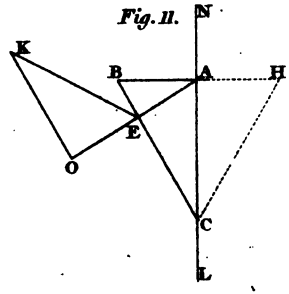

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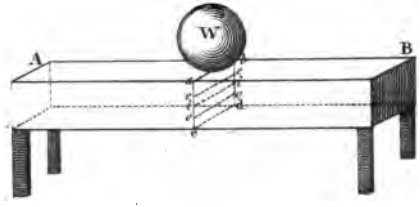

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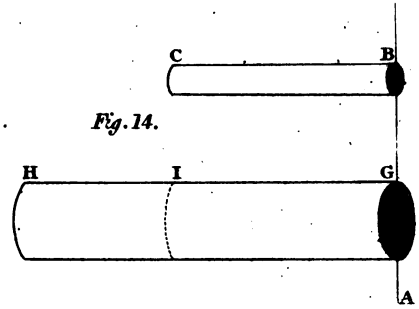

Fig. 14.

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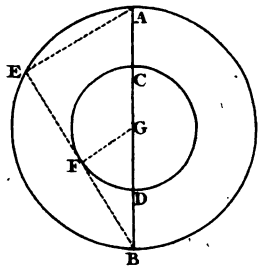

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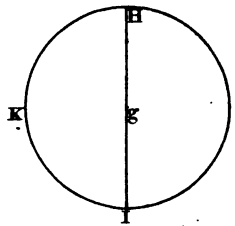

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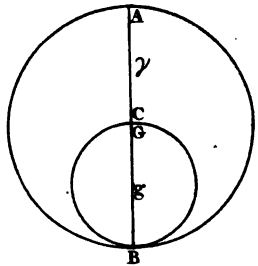

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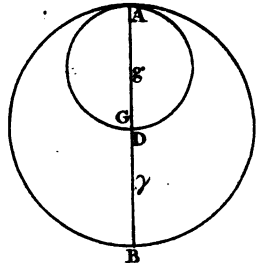

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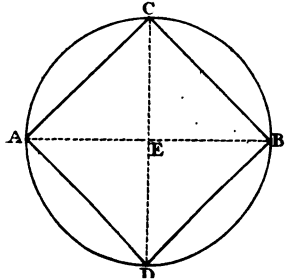

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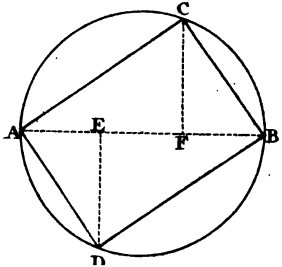

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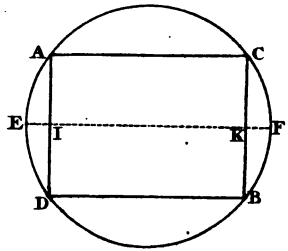

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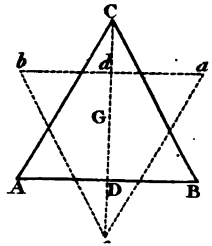

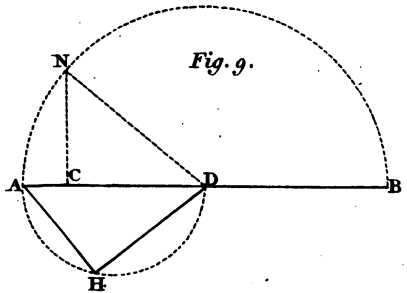

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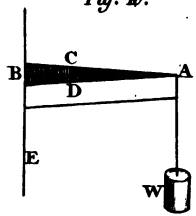

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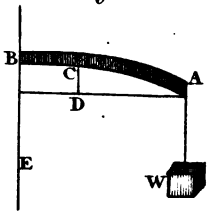

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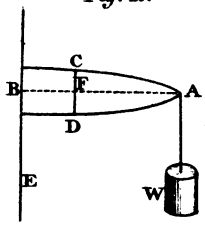

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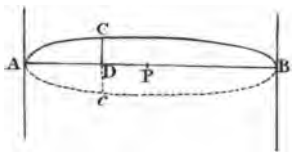

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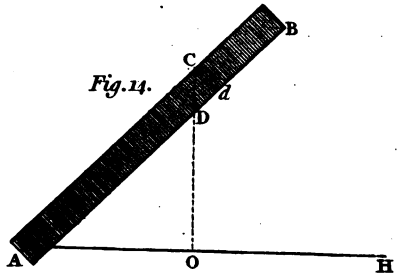

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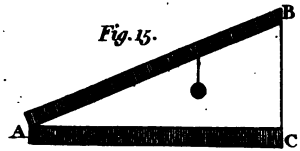
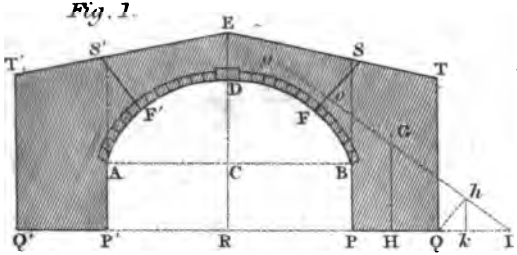


Fig. 15.

Fig. 16.

Matthew sc. Ruggles Co!

Fig. 1.



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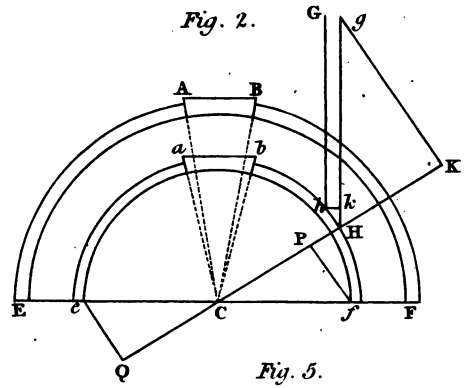

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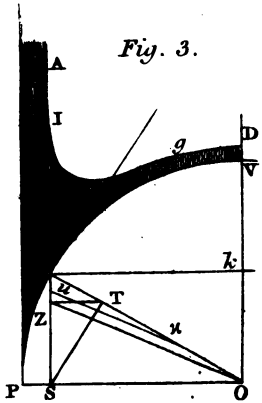

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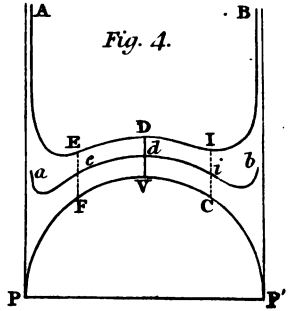

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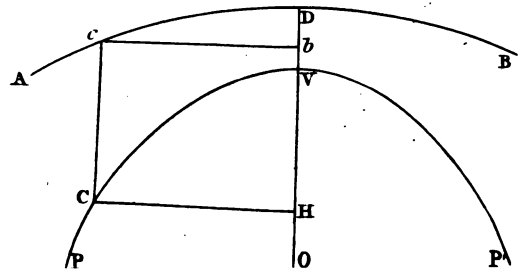

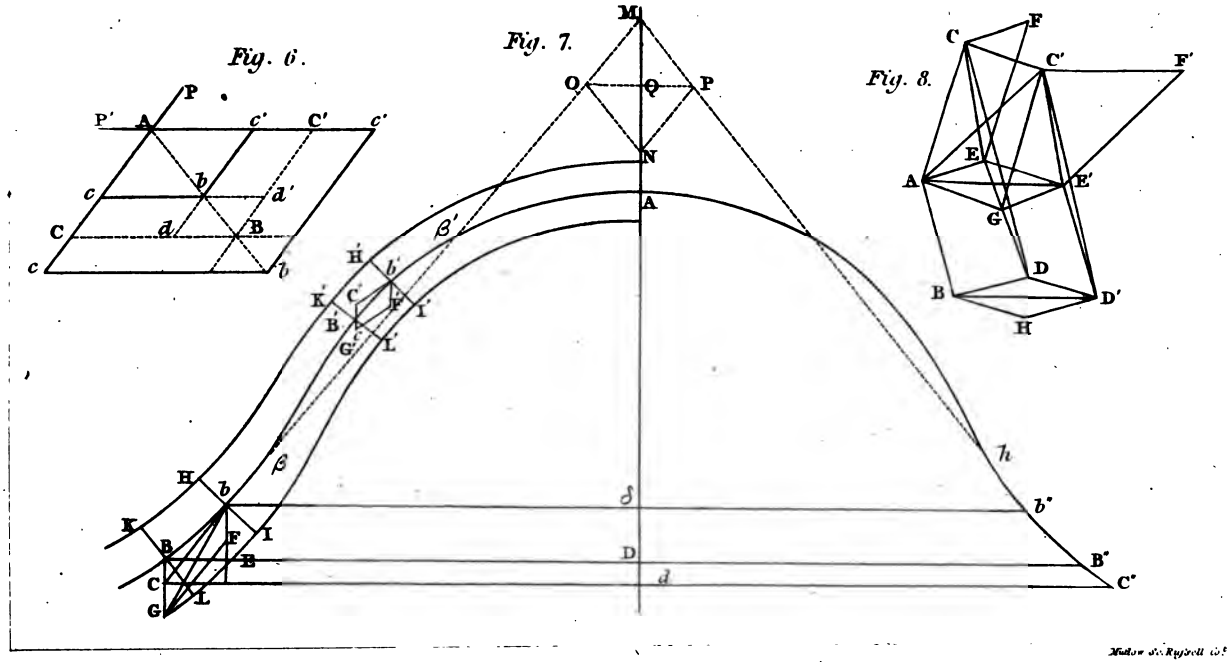
Fig. 6.
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Fig. 7.
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Fig. 8.
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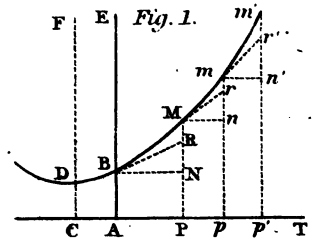
Fig. 1.
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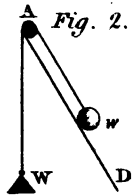
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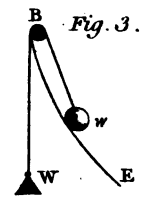
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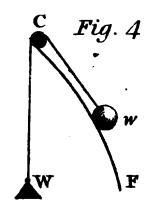
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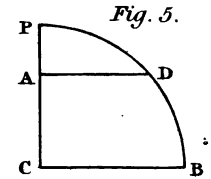
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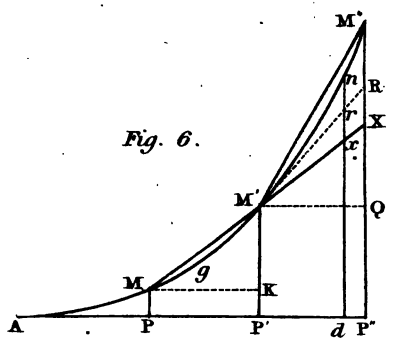
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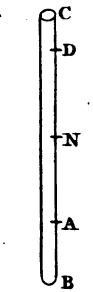
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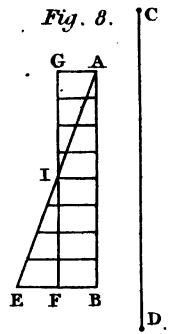
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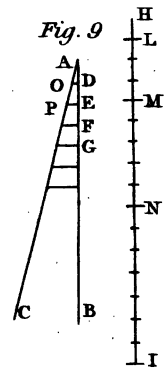
Fig. 9
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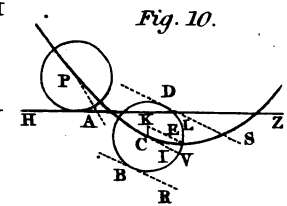
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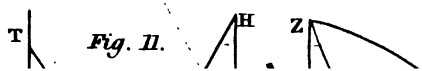
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Fig. 11.
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Fig. 12.
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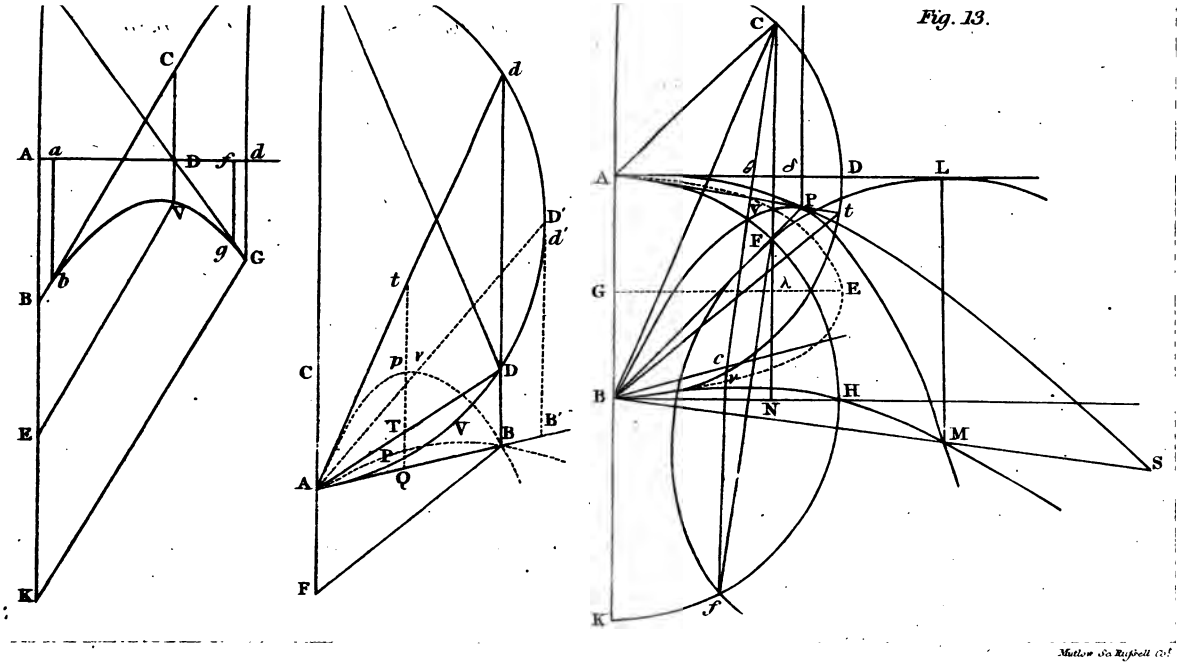
Fig. 13.
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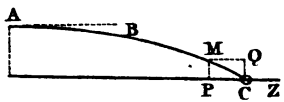
Fig. 1.



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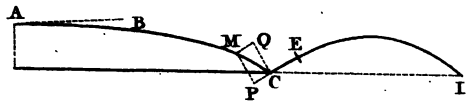

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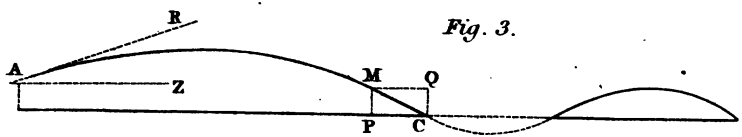

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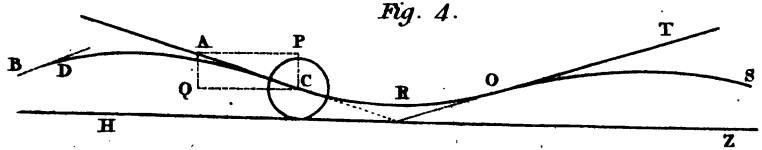

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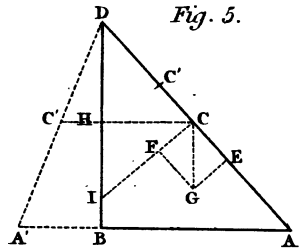

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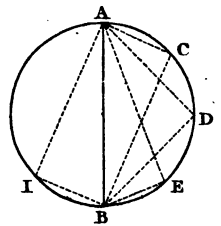

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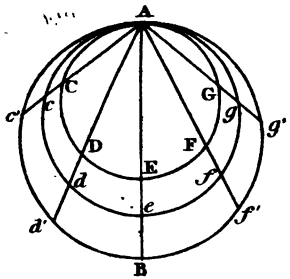
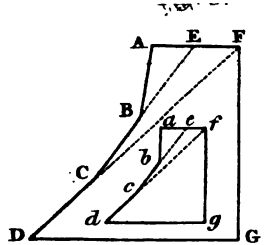
Fig. 8





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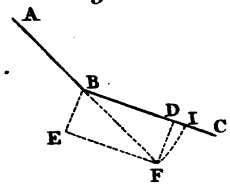

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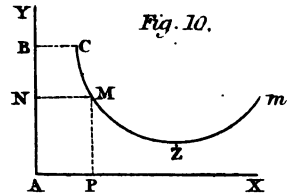

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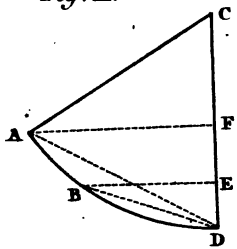

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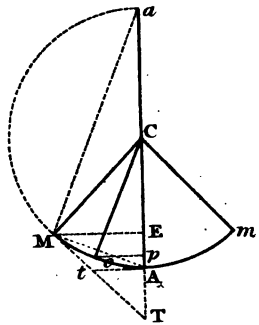

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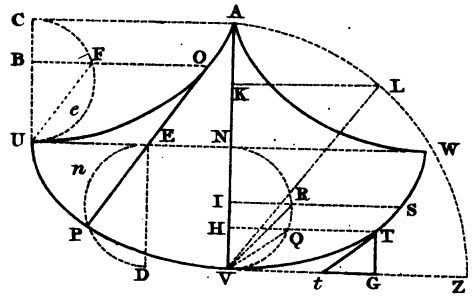

Mallow Sc. Edgehill Co.

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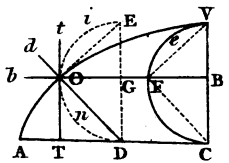

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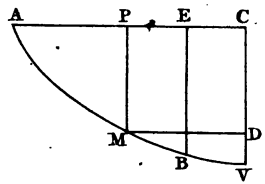

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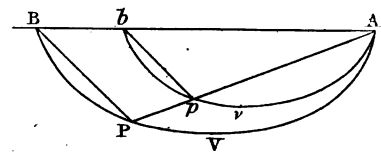

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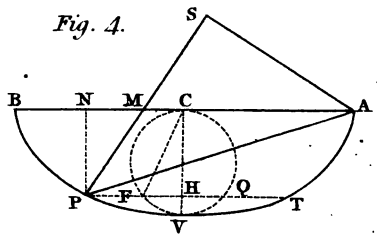

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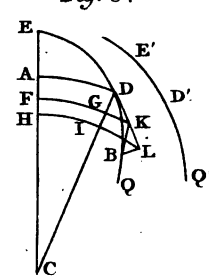

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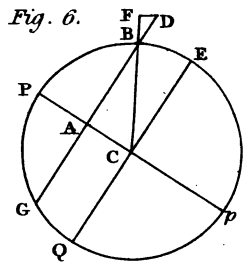


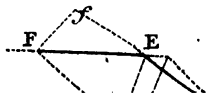
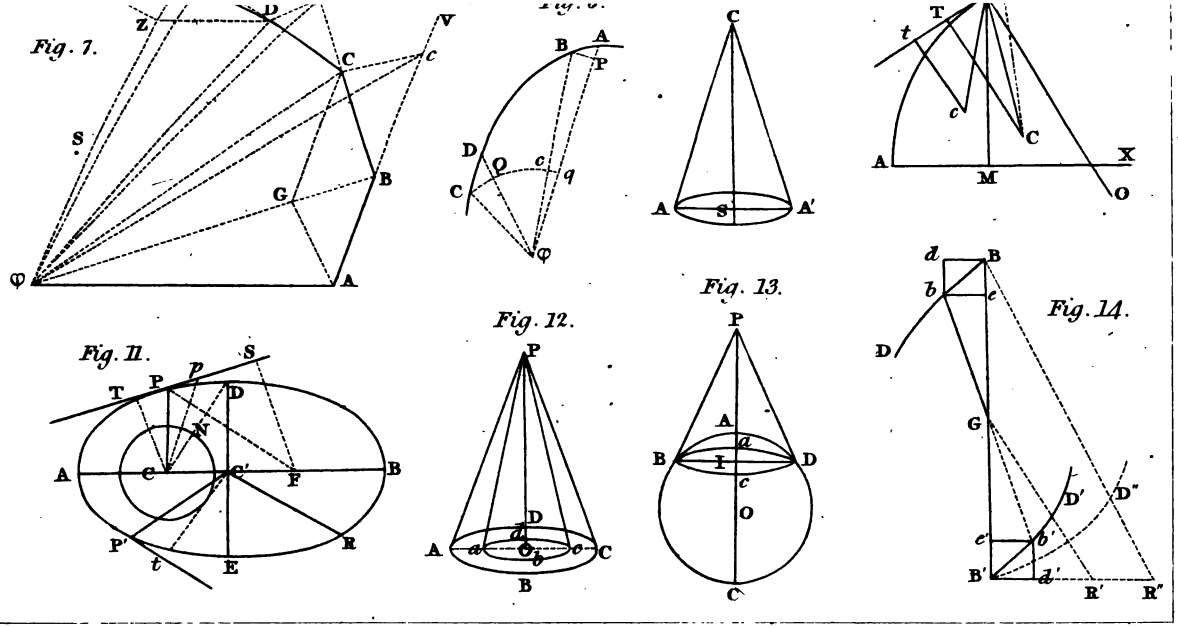


Fig. 9.

Fig. 10.



Mallon Sc. Russell Co.

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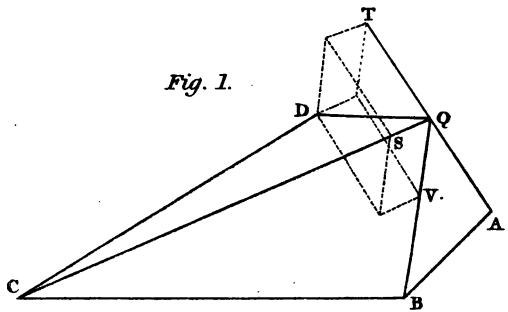

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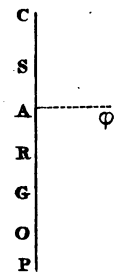

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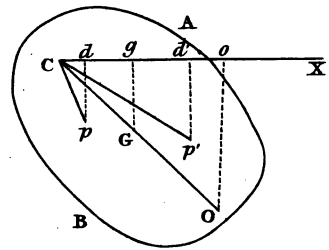

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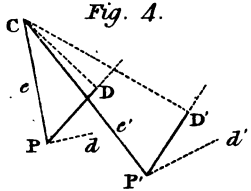

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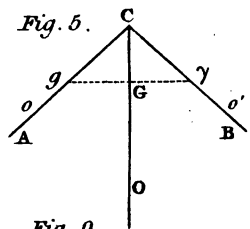

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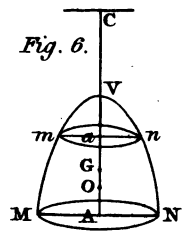

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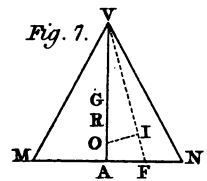

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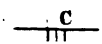

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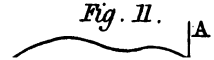

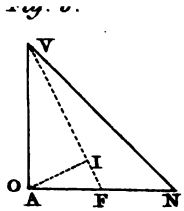

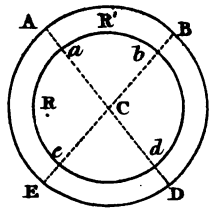

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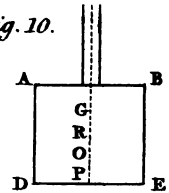

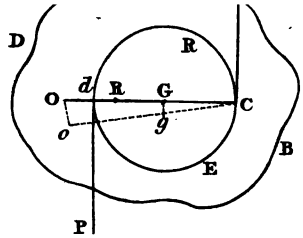

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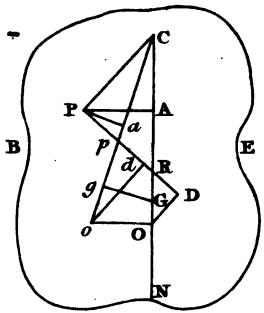

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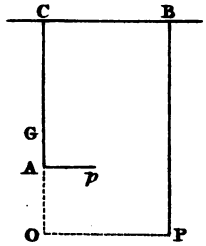

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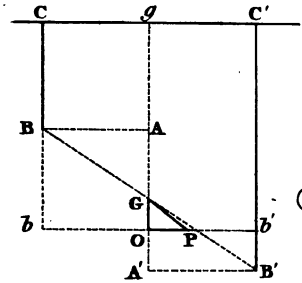

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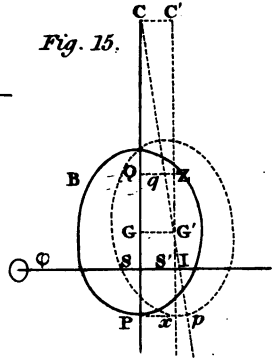

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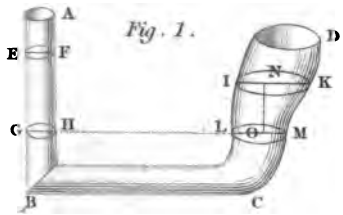

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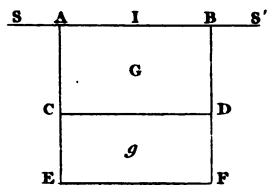

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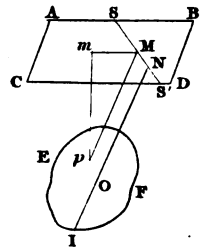

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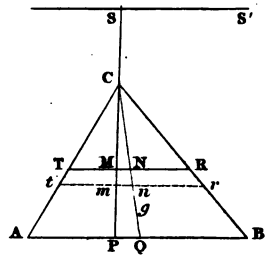

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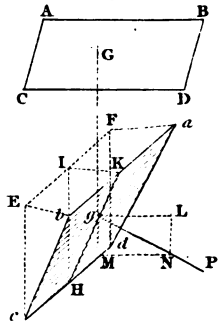

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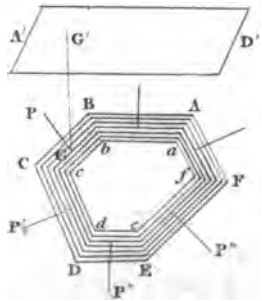

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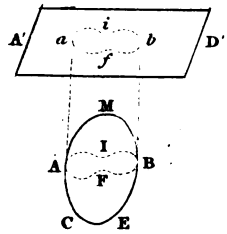

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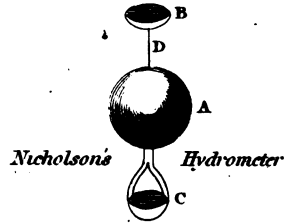

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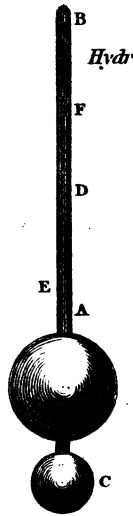

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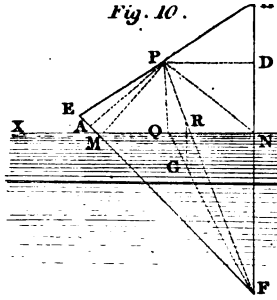

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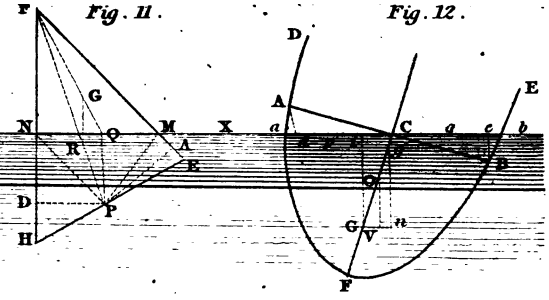

Fig. 12.

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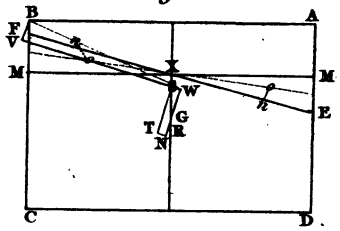

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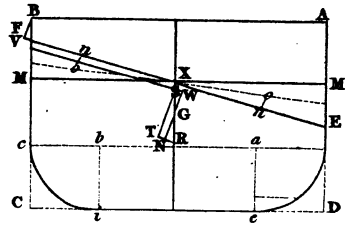

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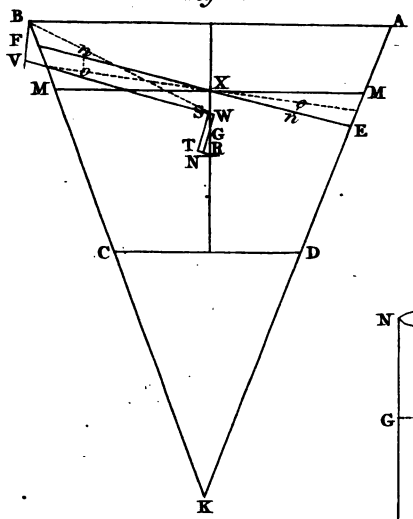

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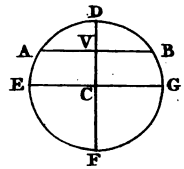

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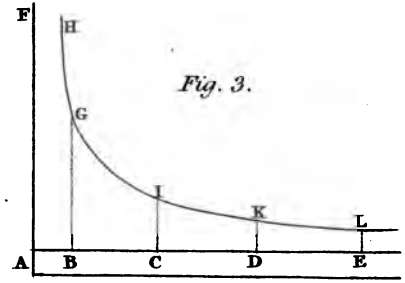

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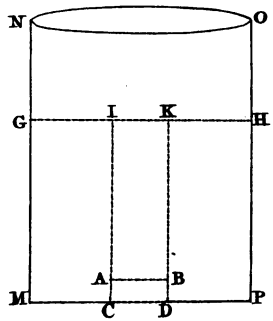

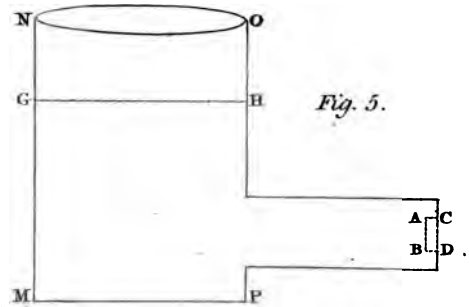

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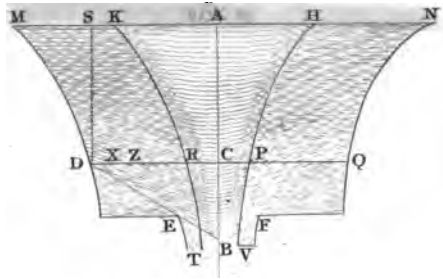

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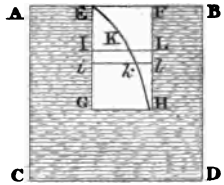

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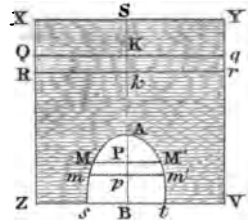

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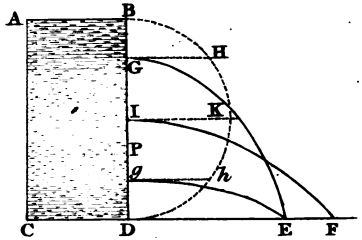

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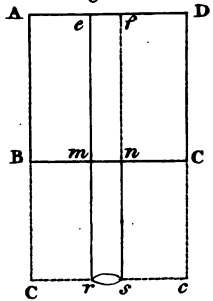

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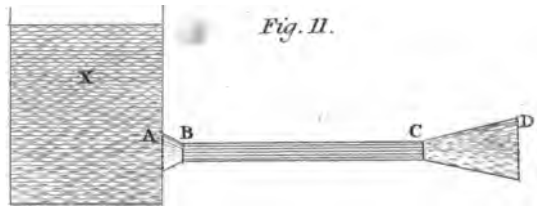

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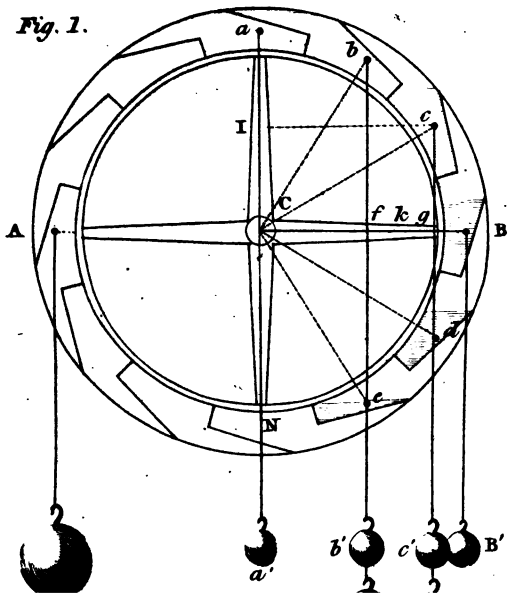

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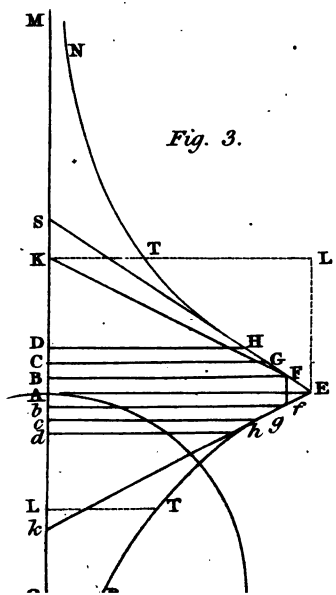

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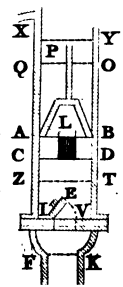

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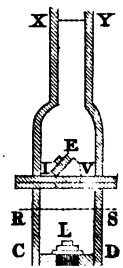

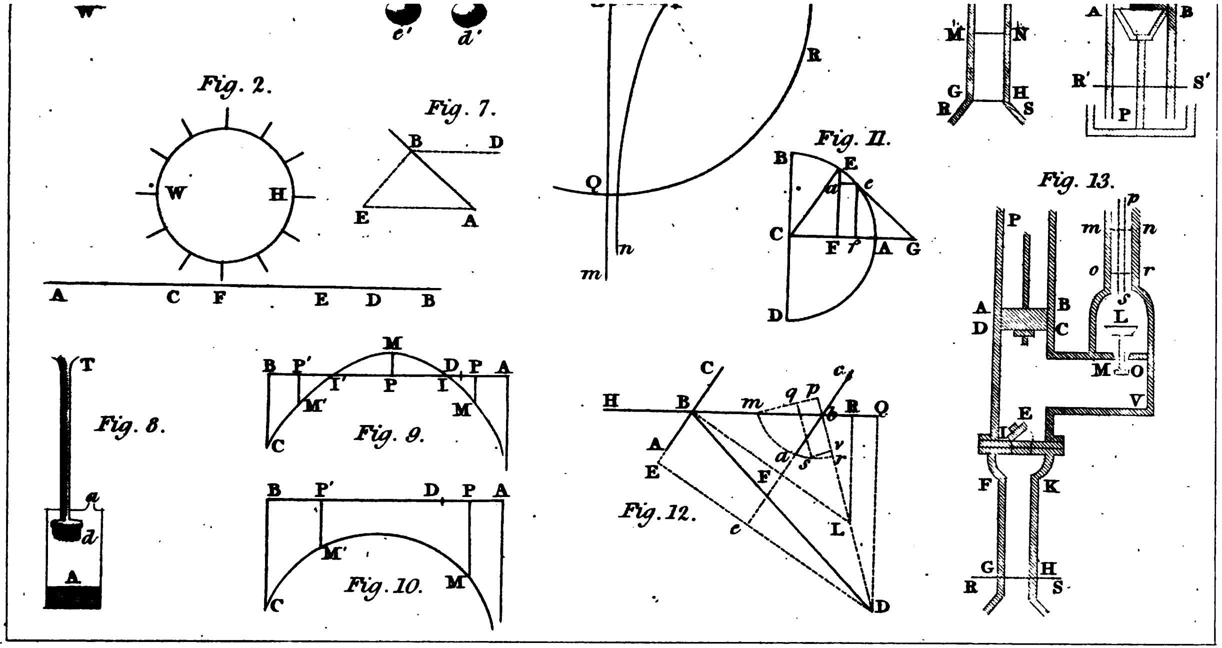

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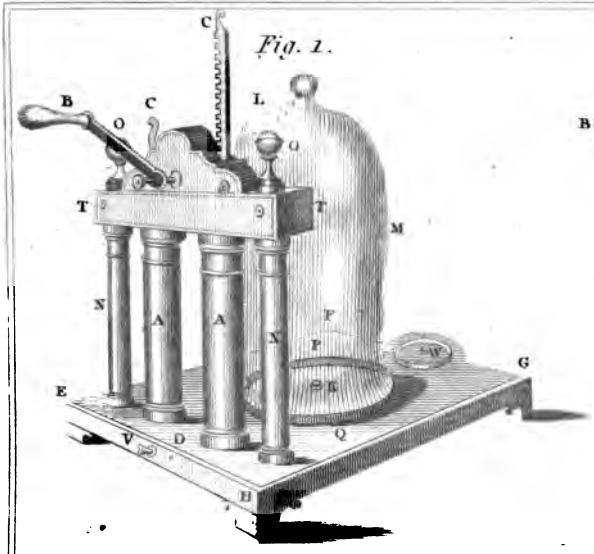

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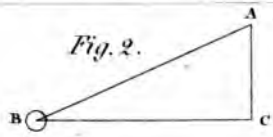

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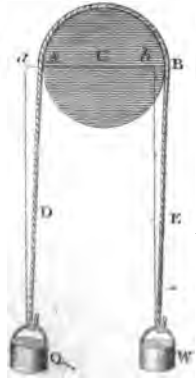

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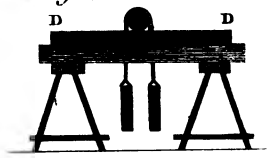

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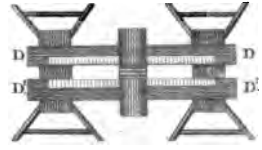

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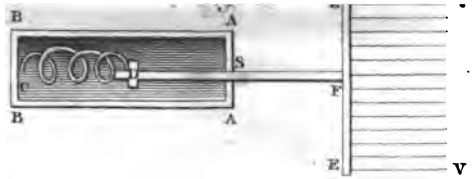

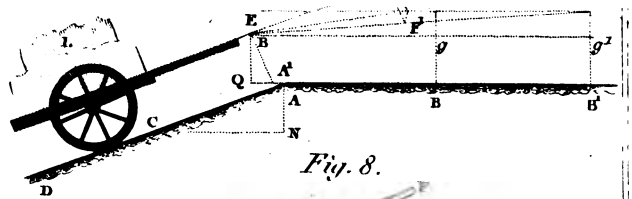

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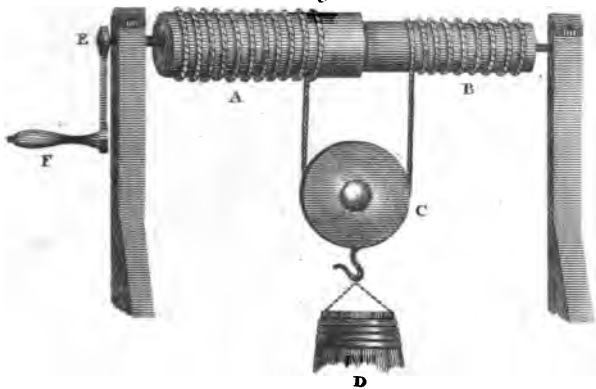

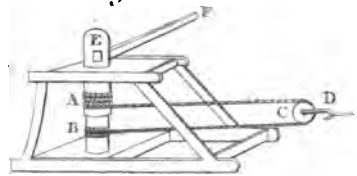

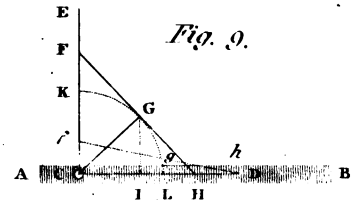

Fig. 9.

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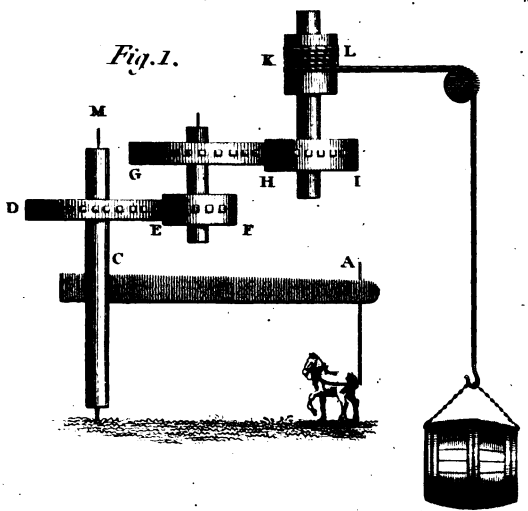

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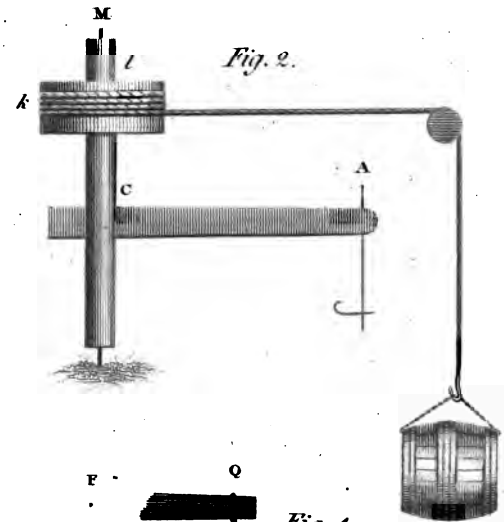

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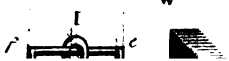

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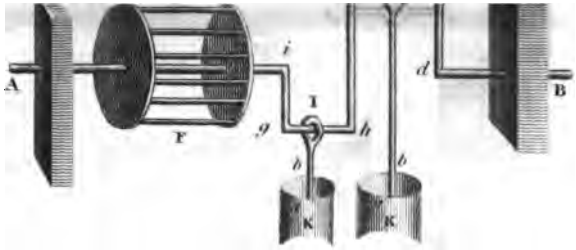

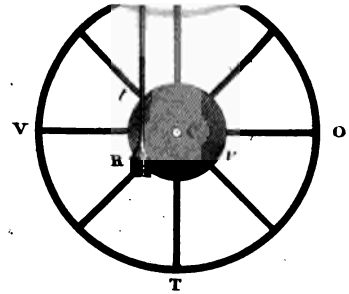

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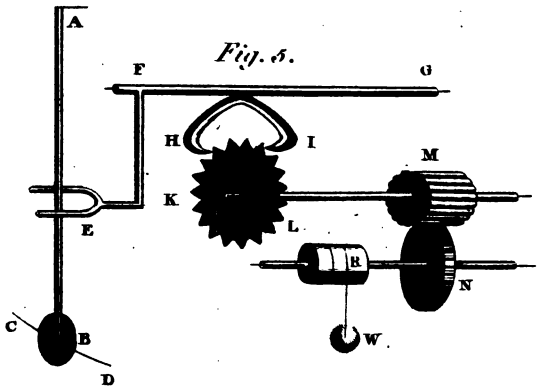

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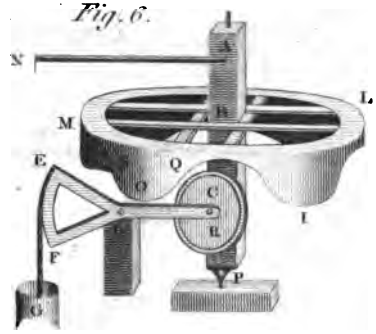

Barlow sculp.

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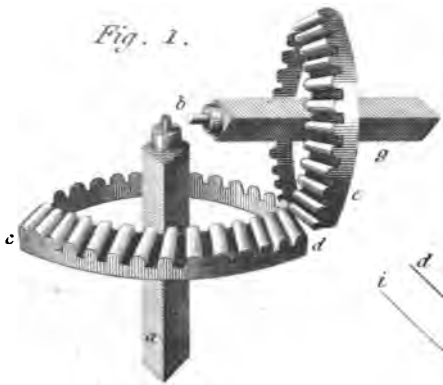

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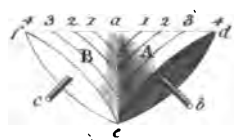

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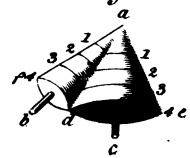


Fig. 4.

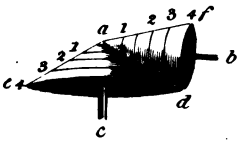
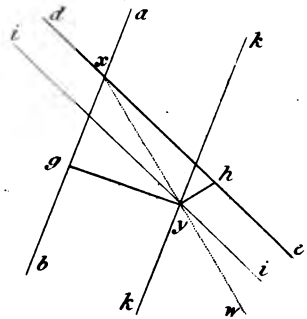


Fig. 5.

Fig. 6.



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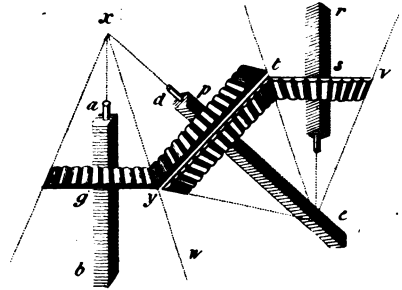
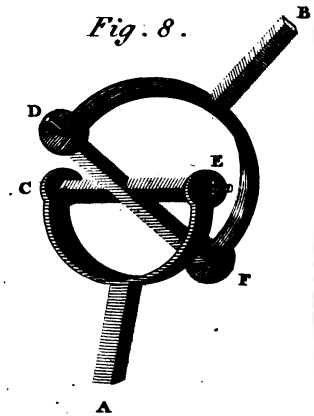


Fig. 9.

Fig. 10.



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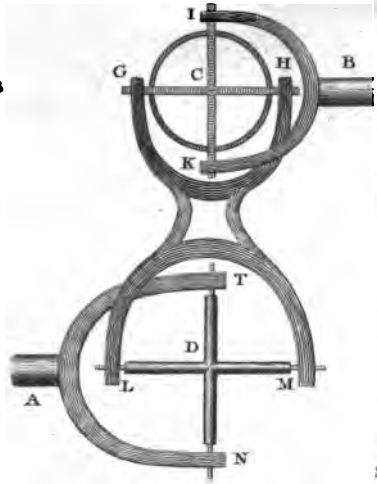


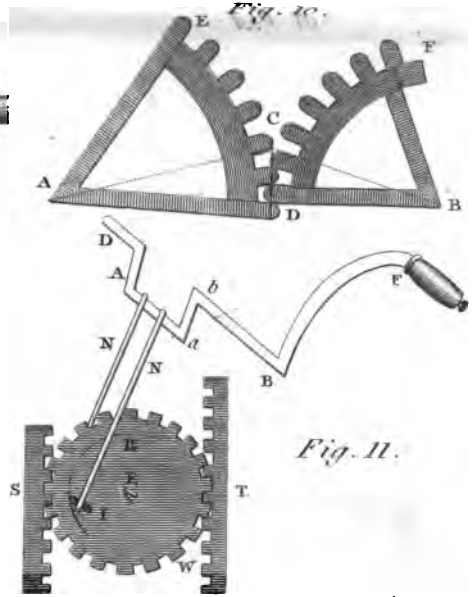
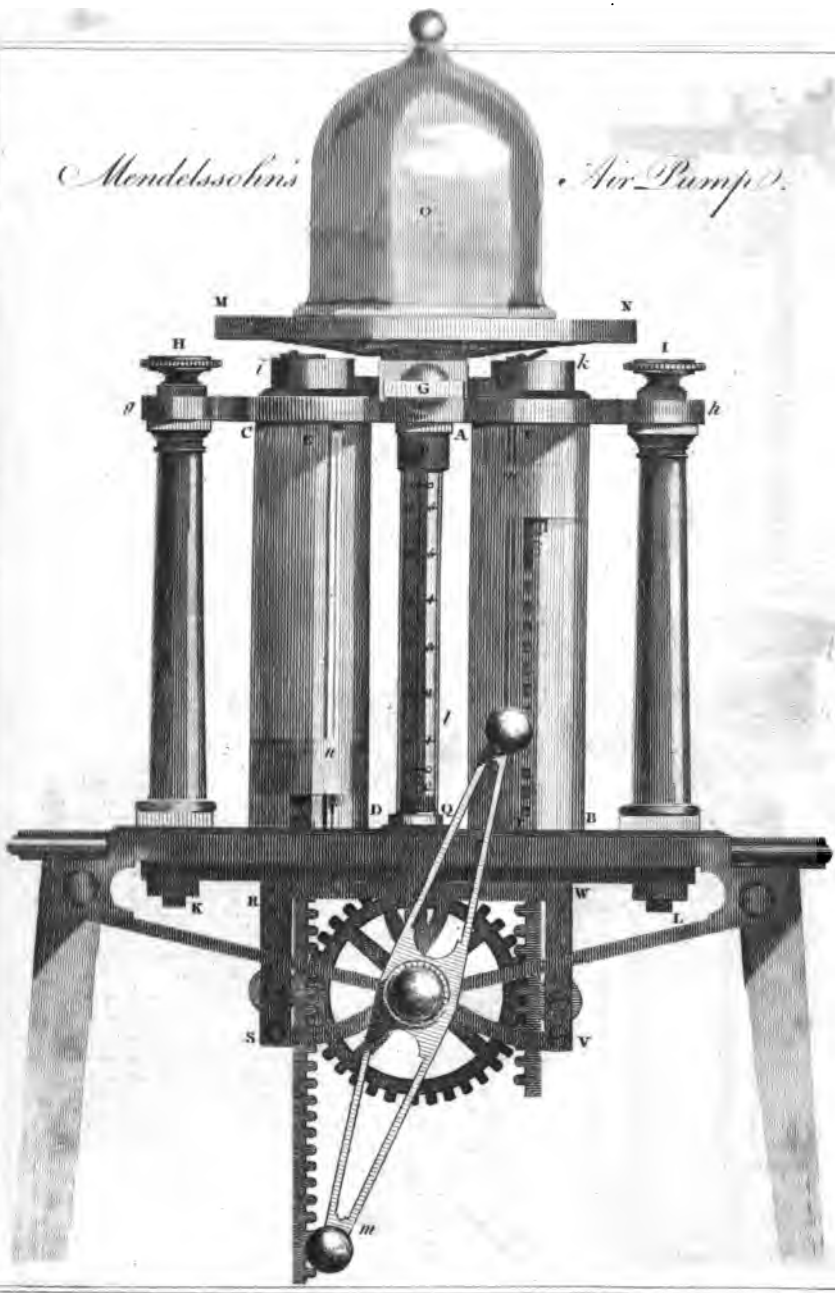


Fig. 11.

Barlow sculp.


Mendelssohn's Air Pump.
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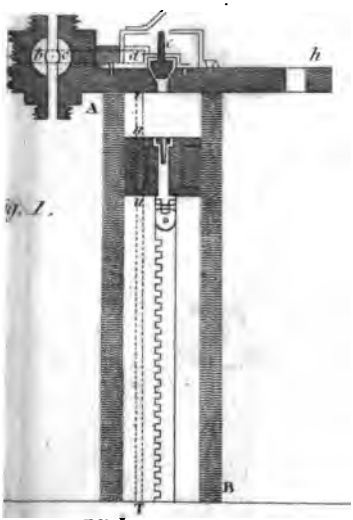


Fig. 1.

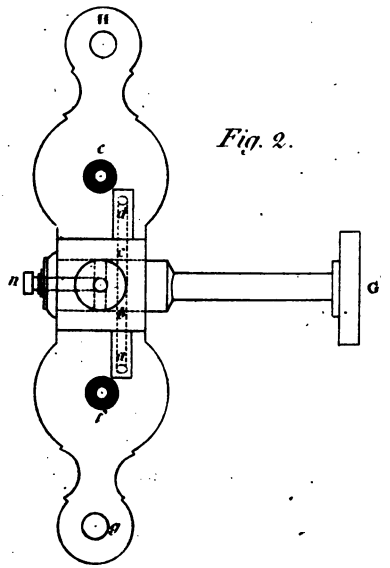
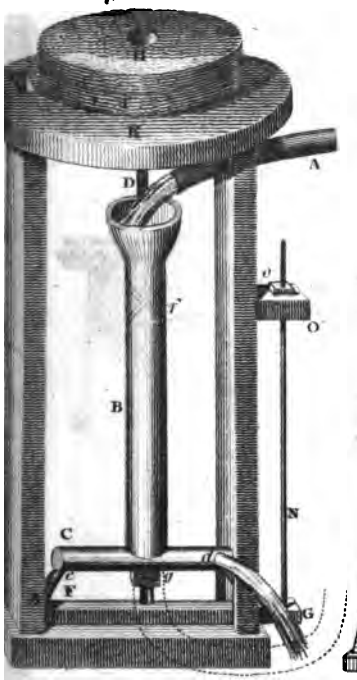


Fig. 2.

Fig. 3.



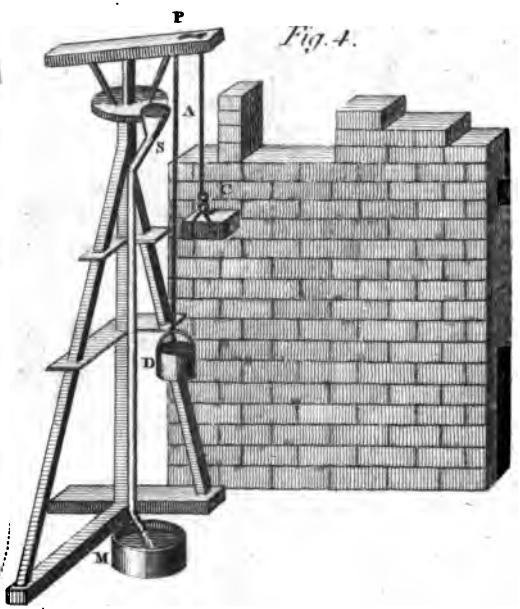


Fig. 4.

Barlow sculp.

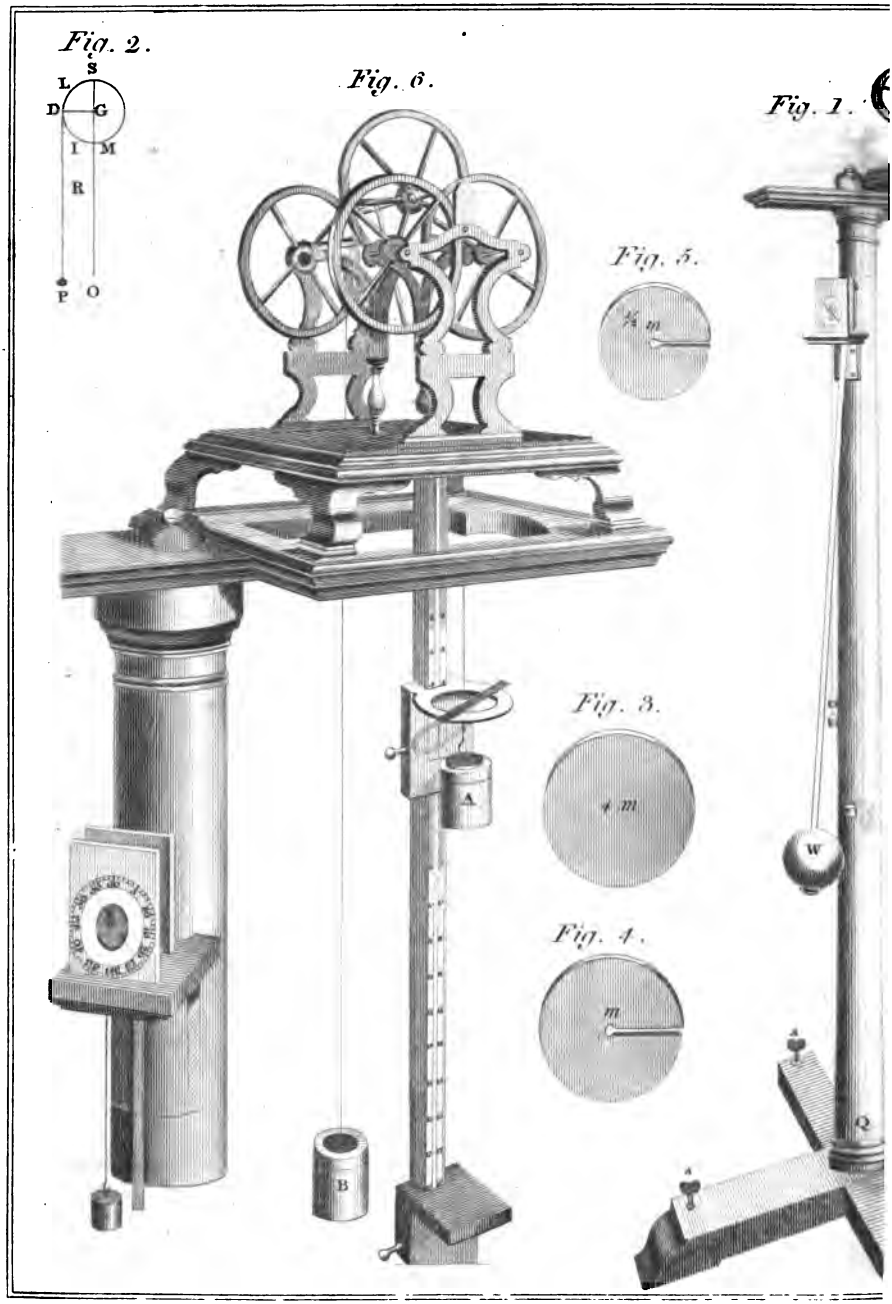


Fig. 2.
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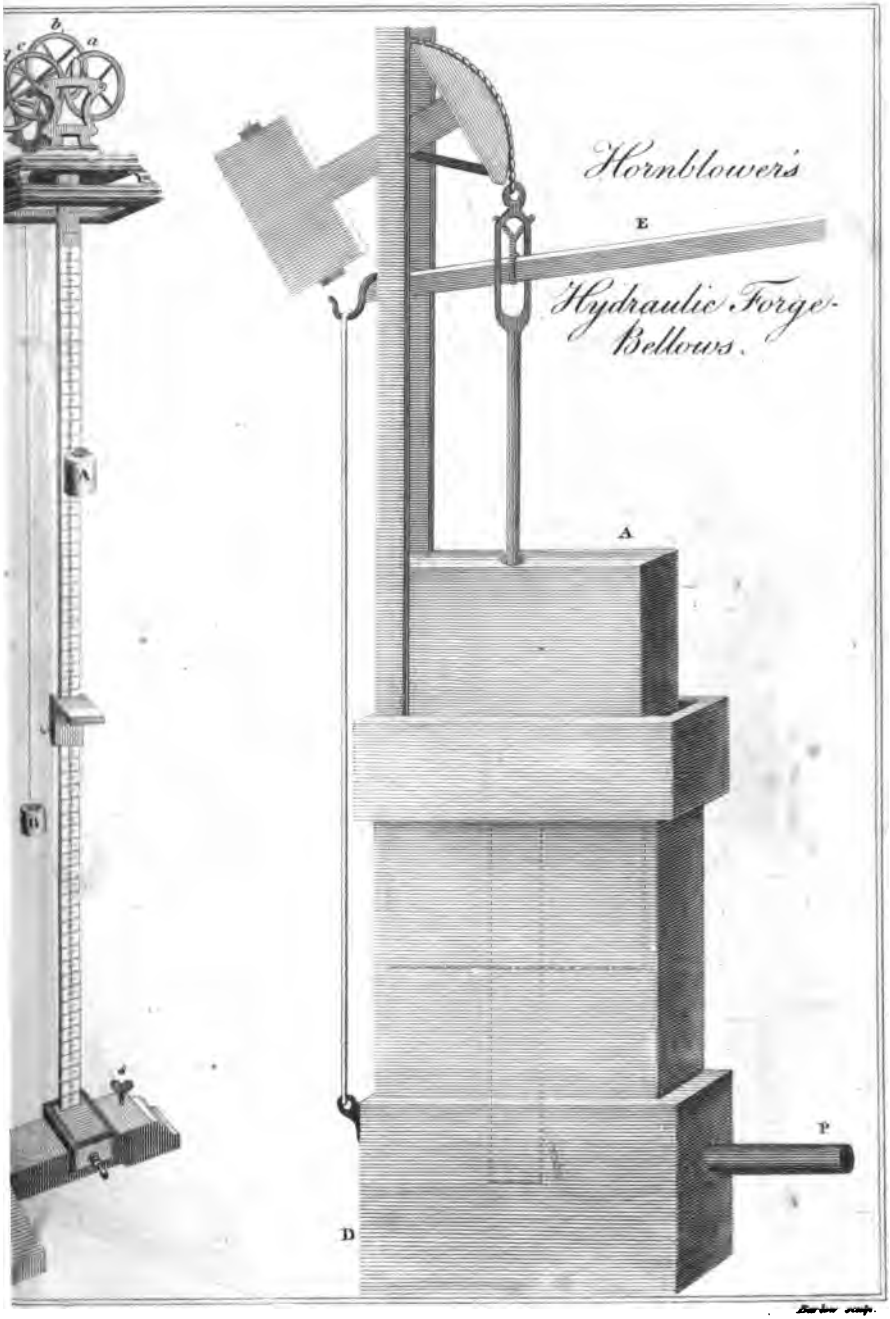
Hornblower's
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Hydraulic Forge-
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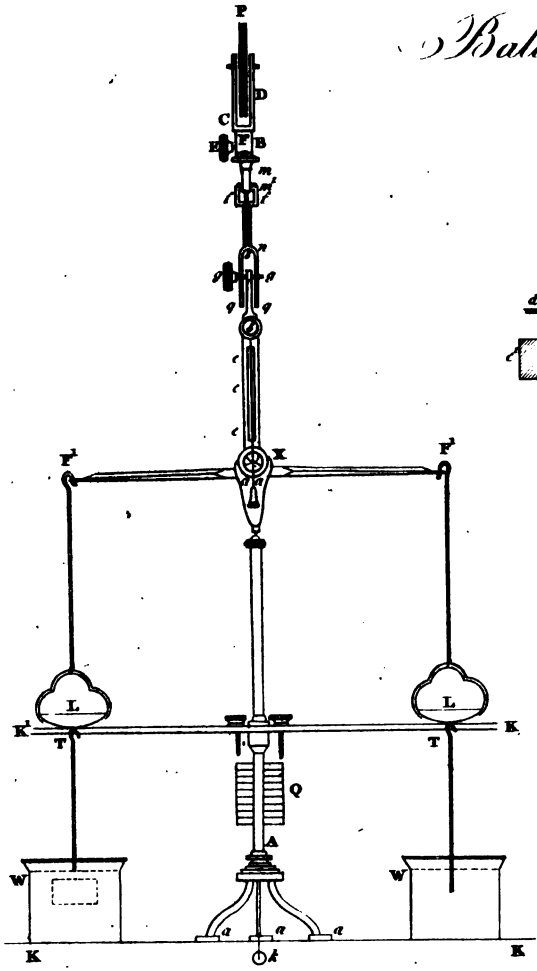
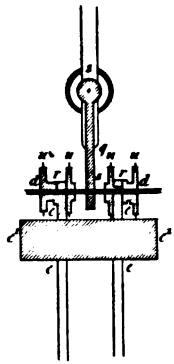
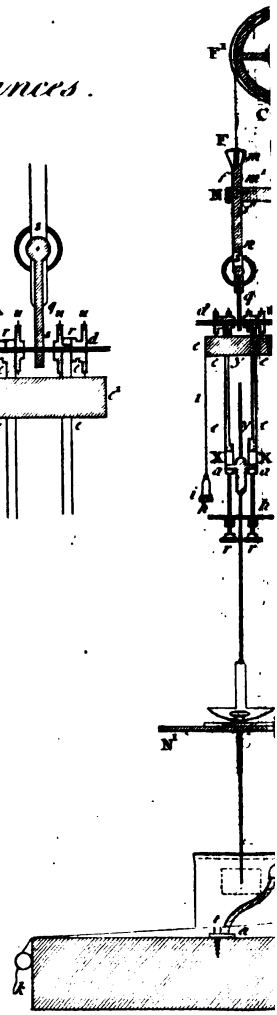
Balances.

Fig. 1.







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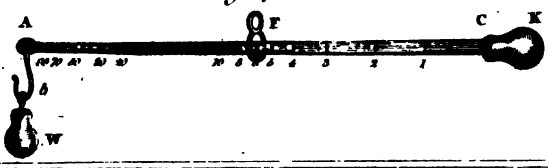

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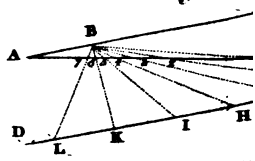
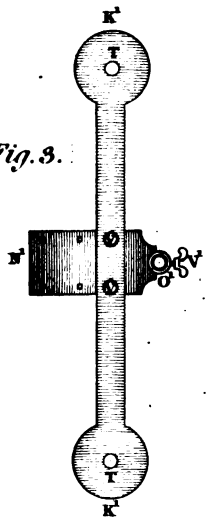


Fig. 2.

Fig. 3.



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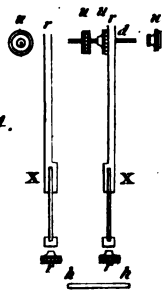

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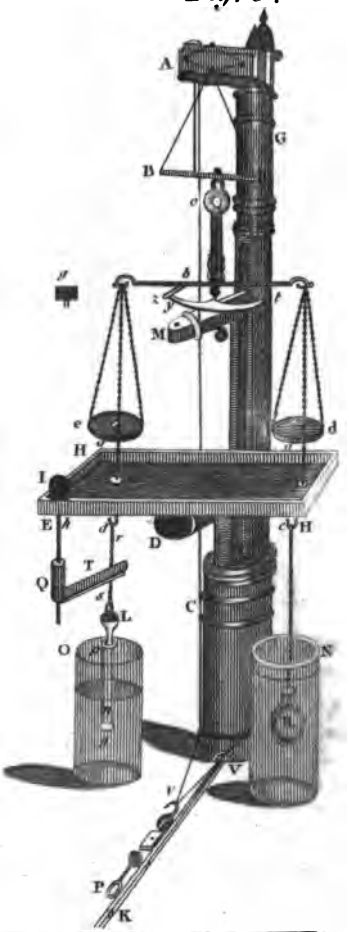

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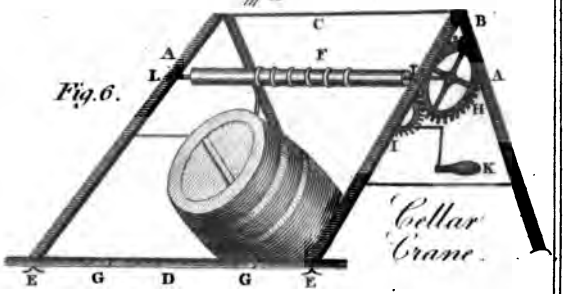
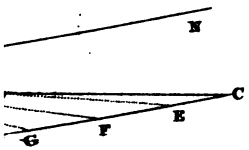
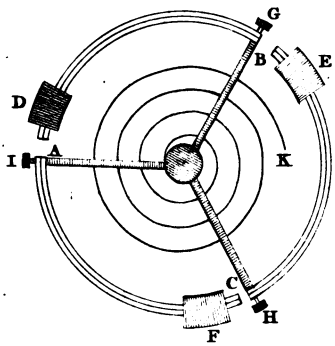


Cellar Crane.



Barlow sculp.

Expansion Balance.



Crane.

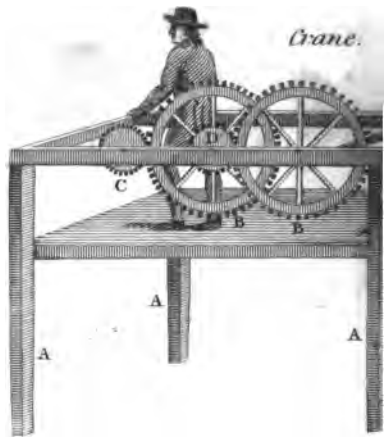


Fig. 6.

Barometers.

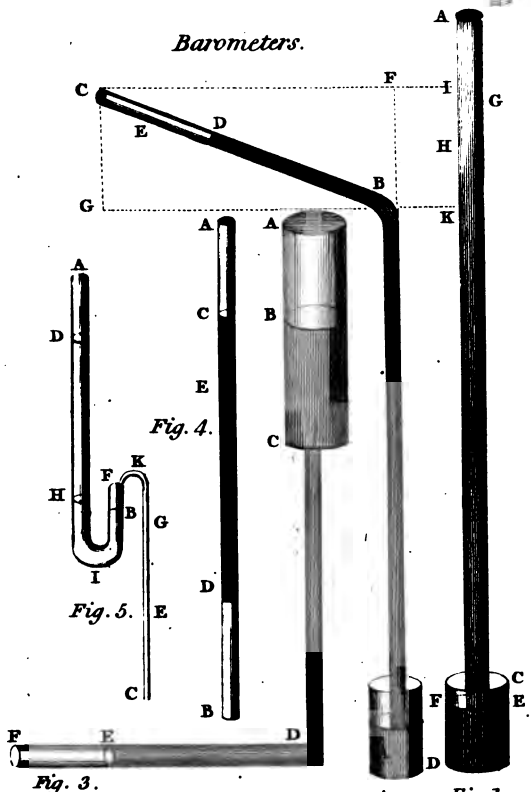


Fig. 4.

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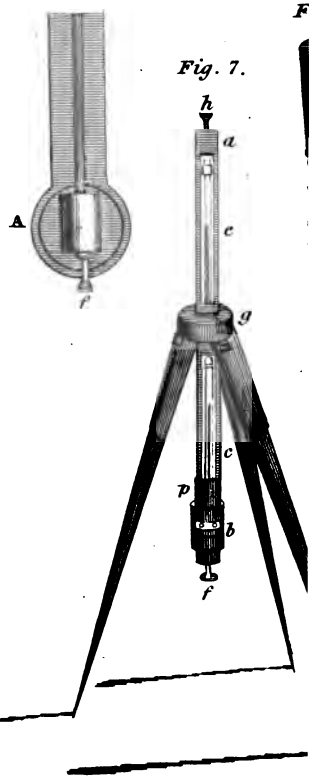
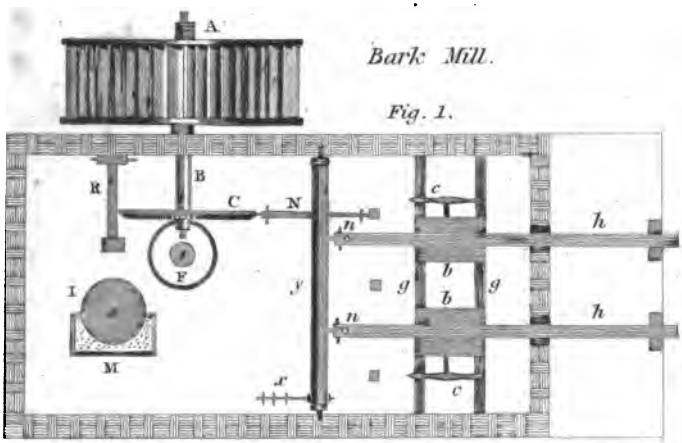
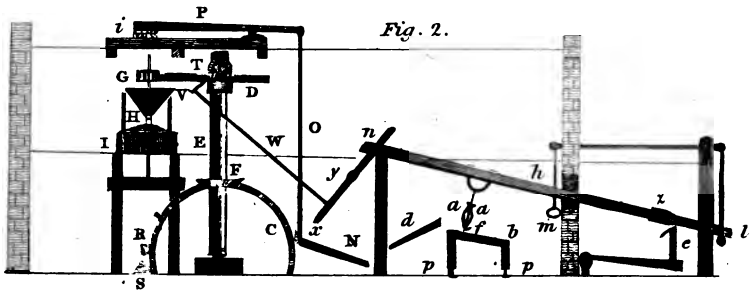




Bark Mill.

Fig. 1.

Fig. 8.



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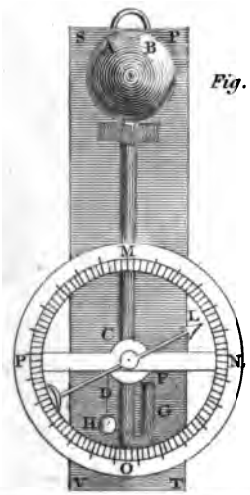


Fig. 9.

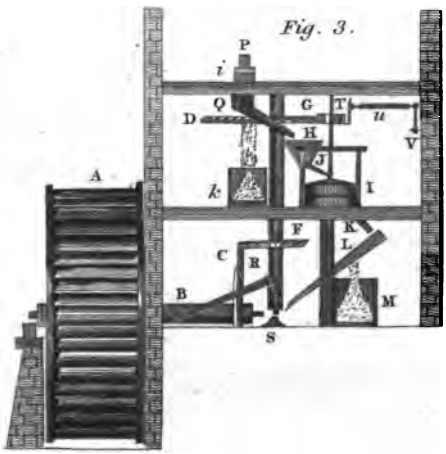


Fig. 3.

Muller fc. Bigwell Ct

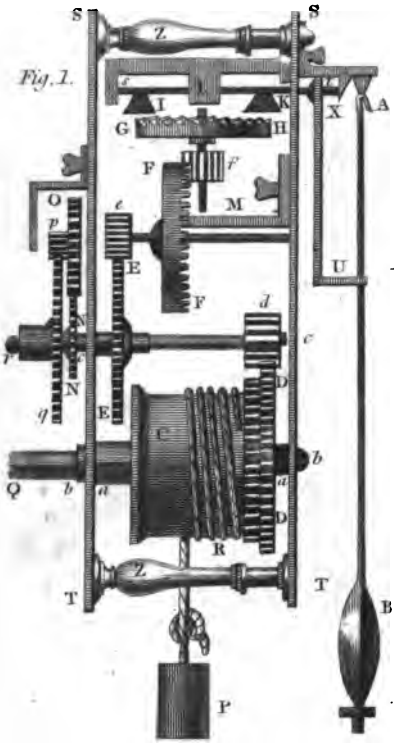
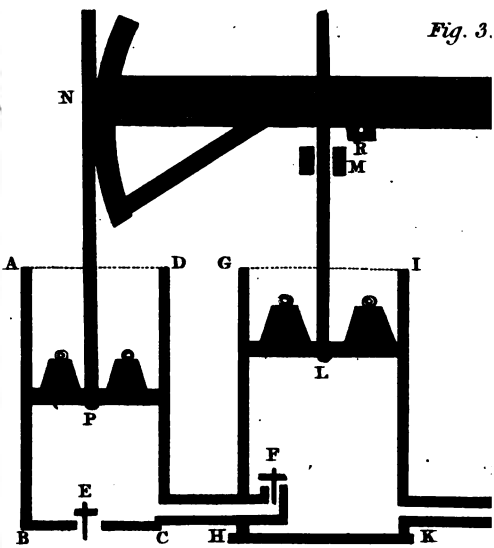


Fig. 1.



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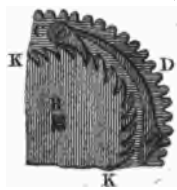

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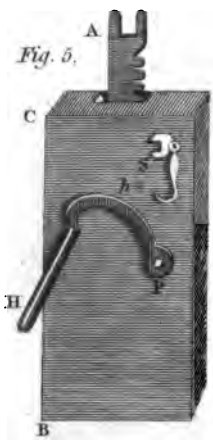

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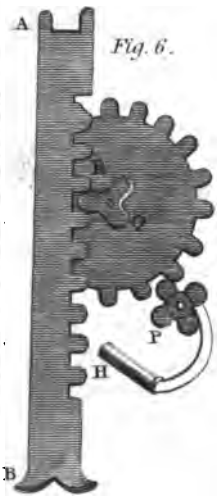

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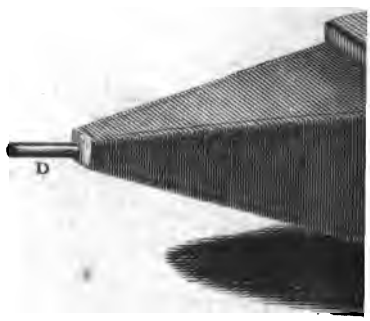
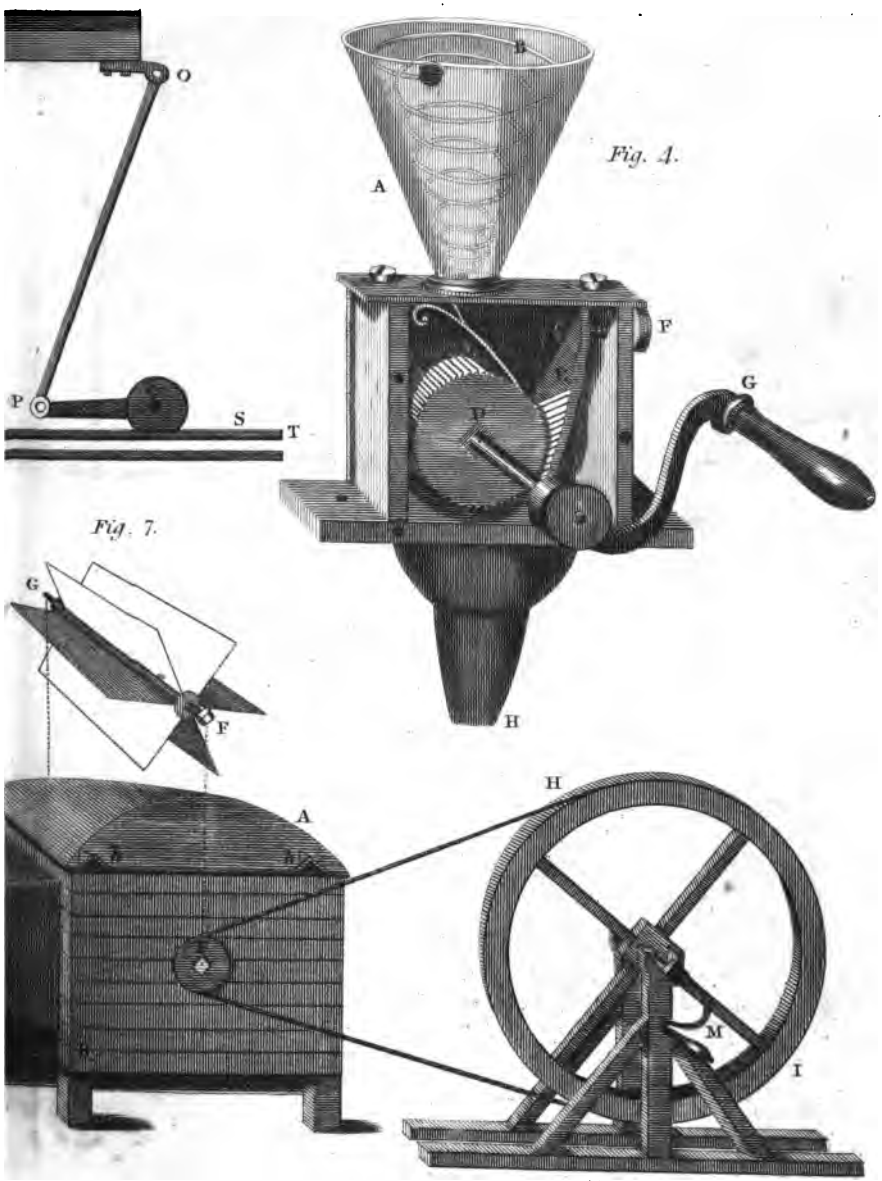


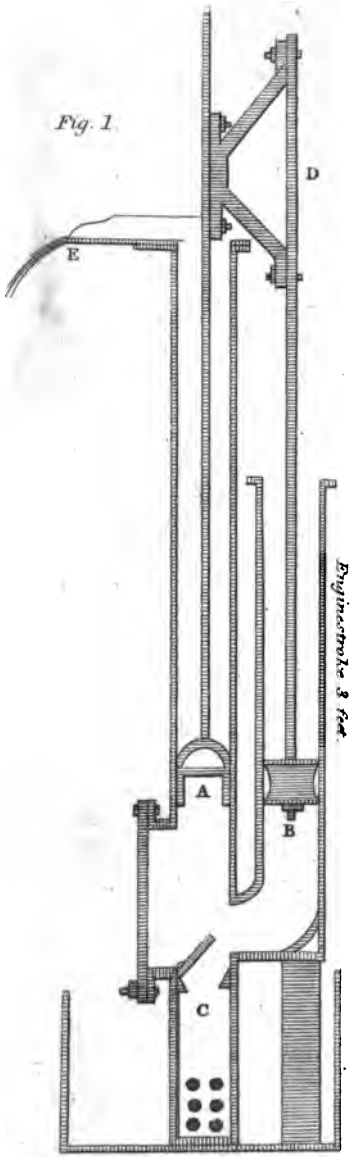
3.

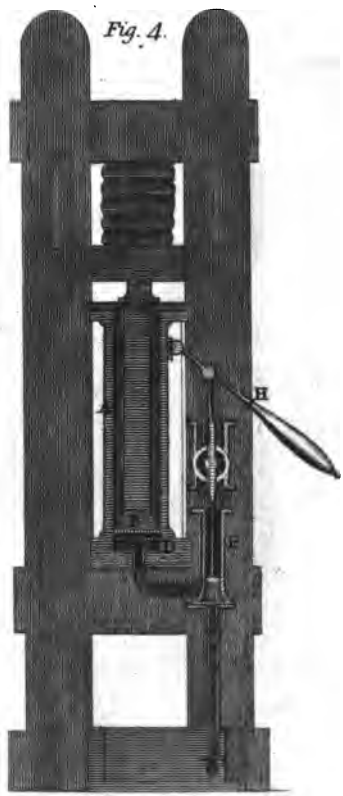
Mill by Mr. Garnet Terry.



Mudon Sc. Russell Sc.

Trevithick's temporary Forcer





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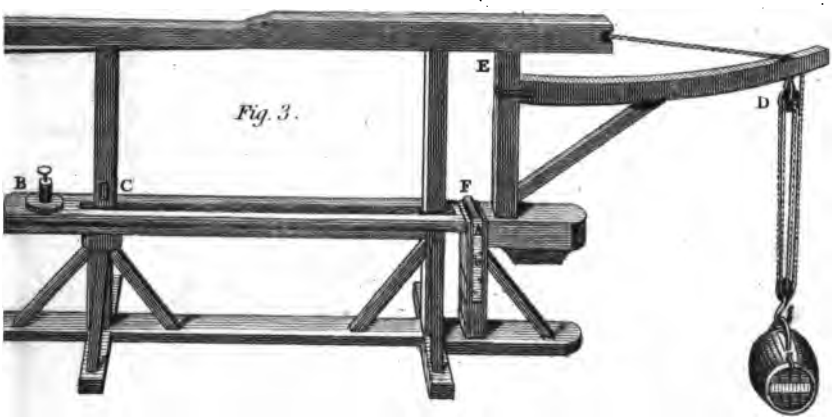

Fig. 3.

Bramah's Press.

Fig. 7.

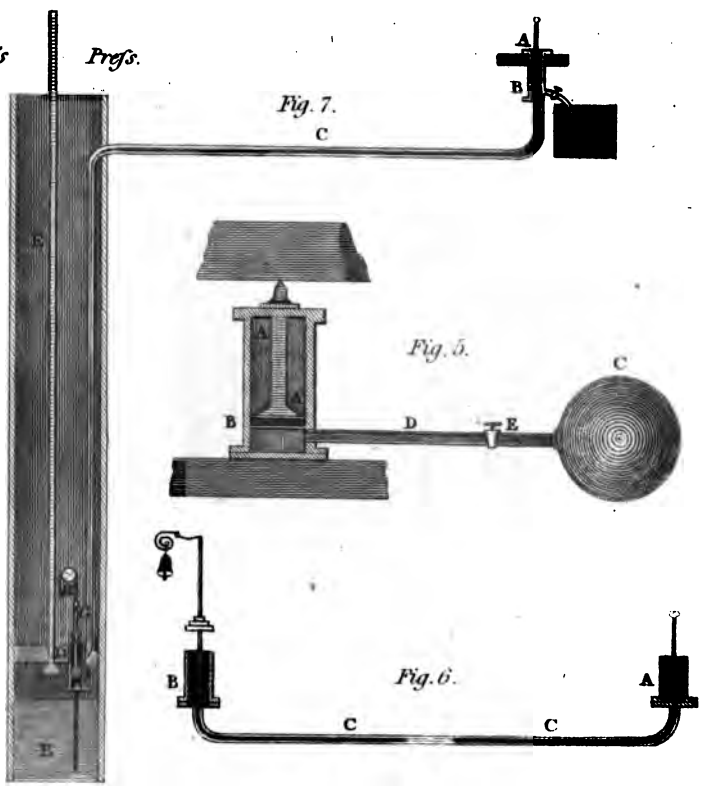

Fig. 5.

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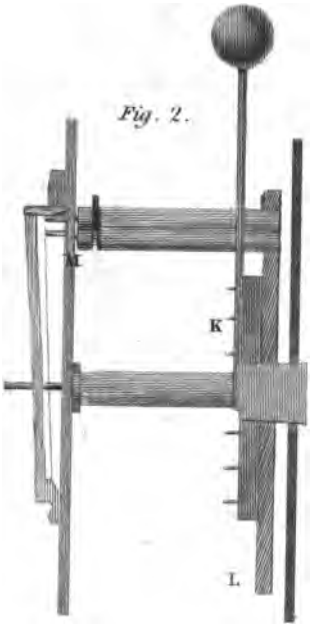

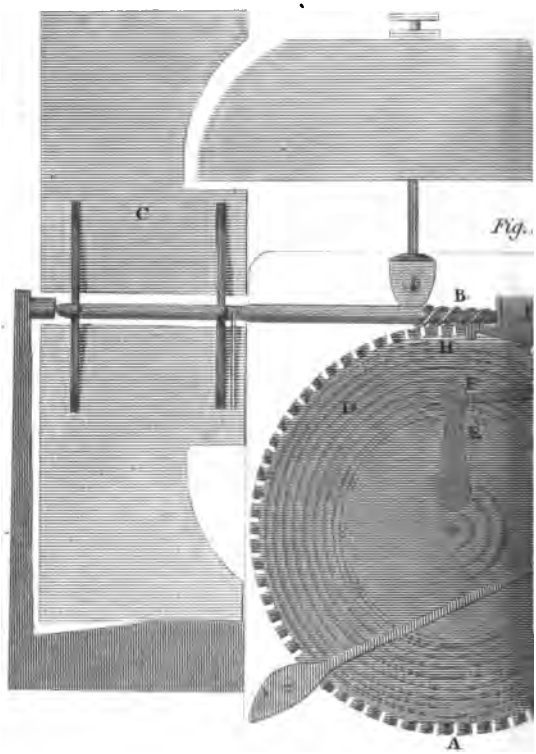

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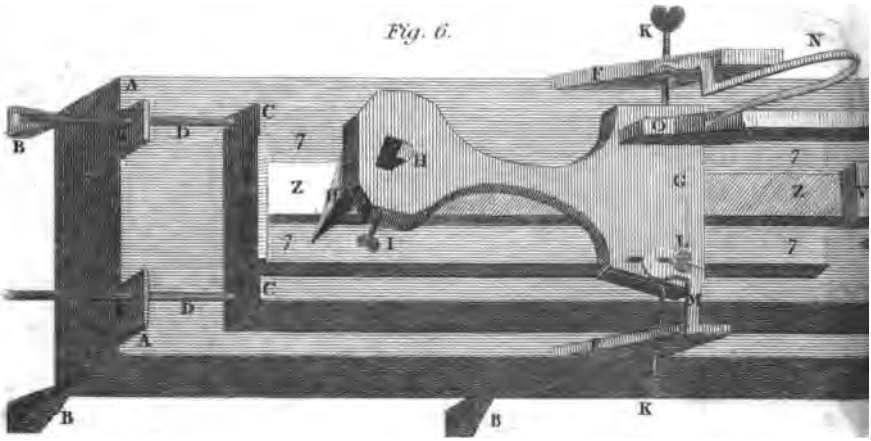

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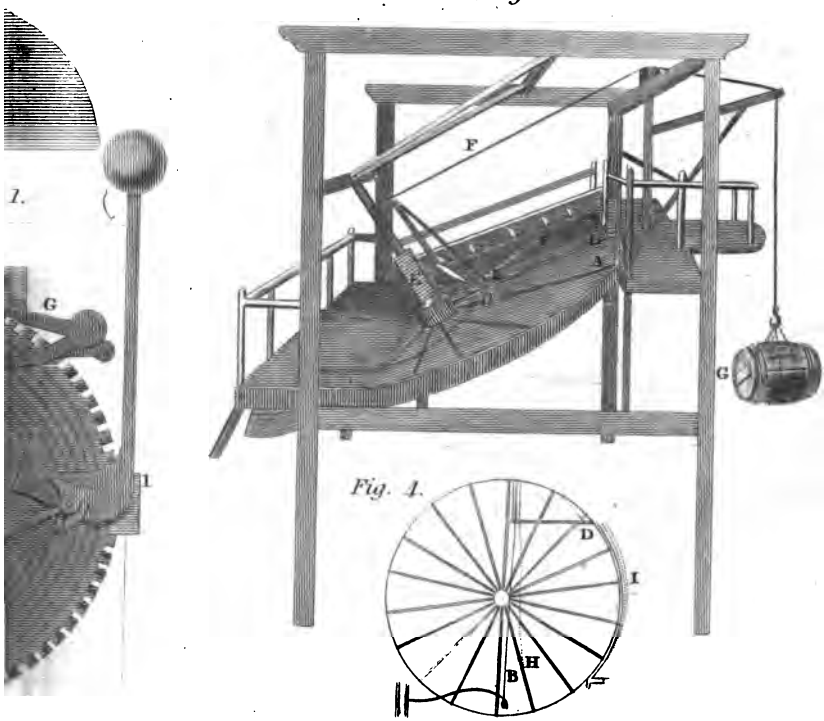
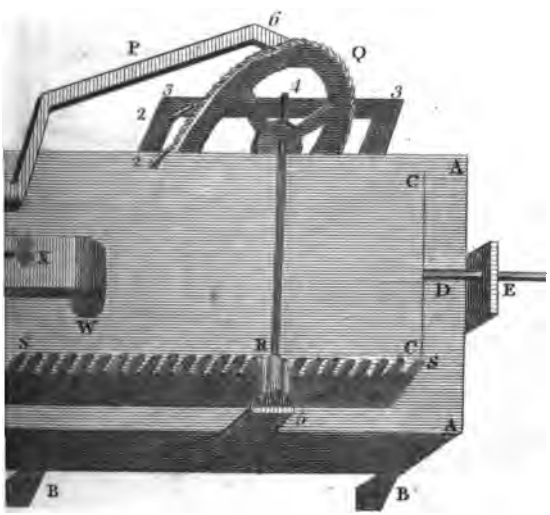
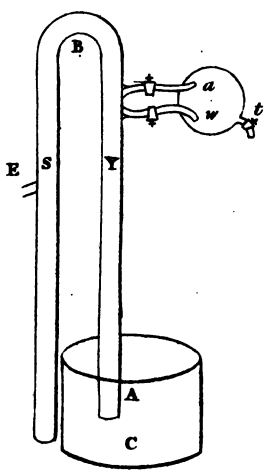


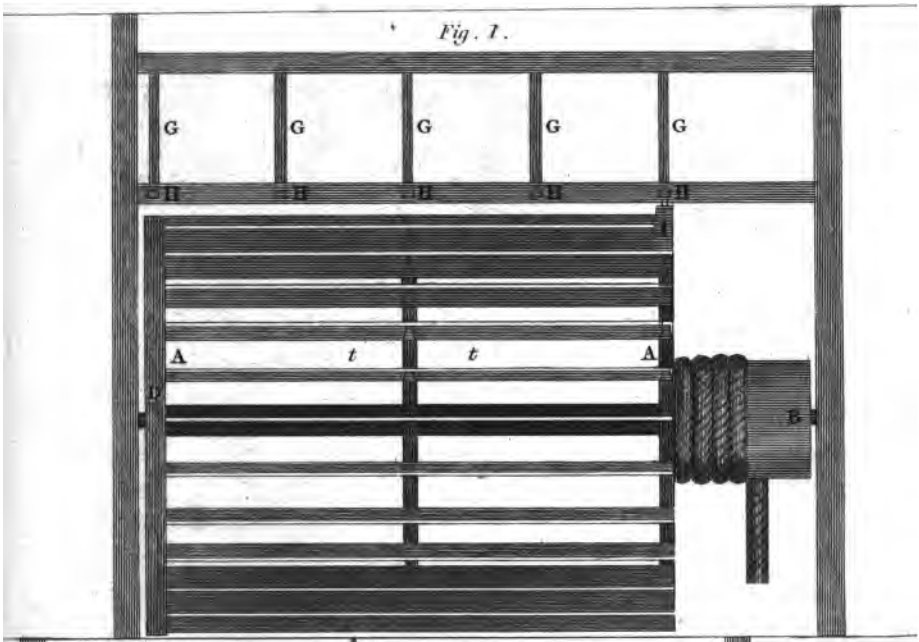
Fig. 4.

Fig. 5.





Mallow Sc. Bagshill Gf.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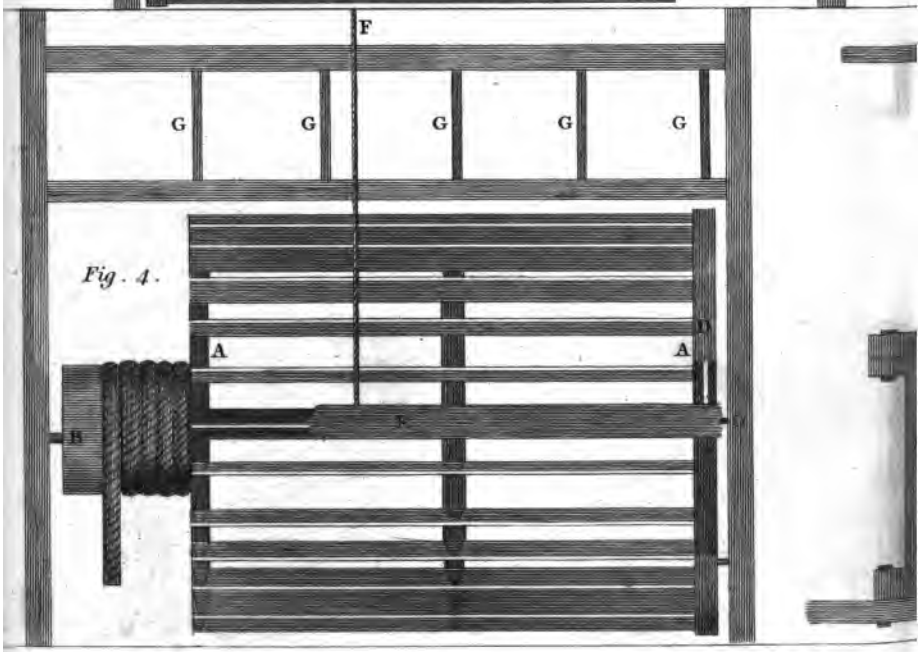
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Fig. 4.
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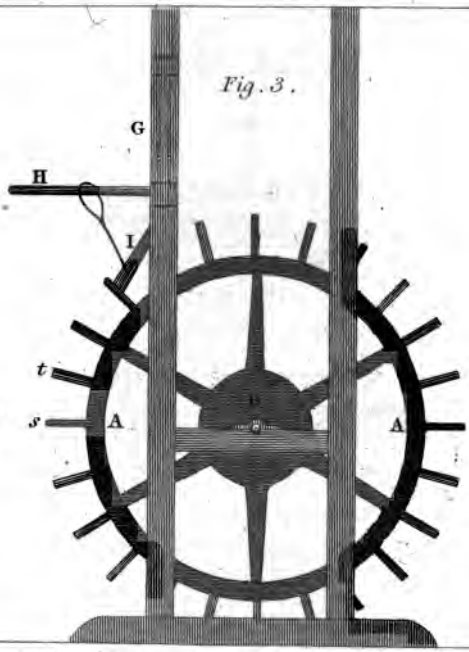
Fig. 3.



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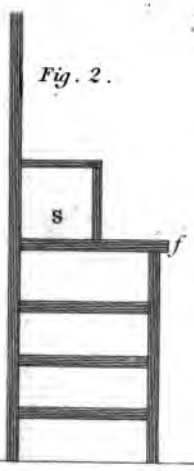

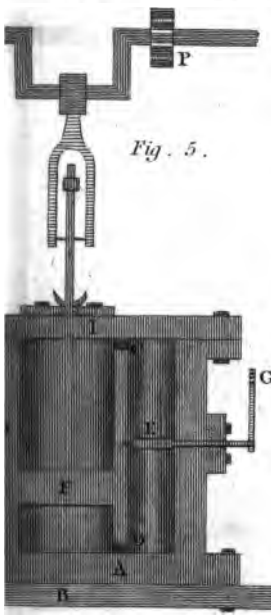

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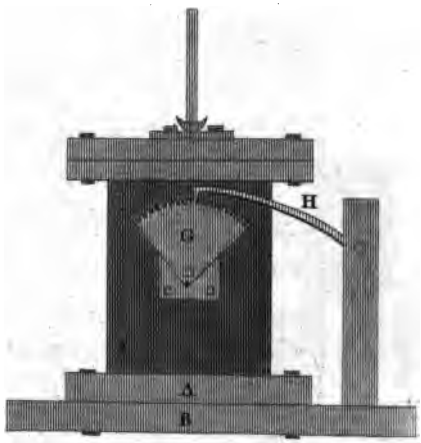

Mutlow Sc. Rufsell Co.

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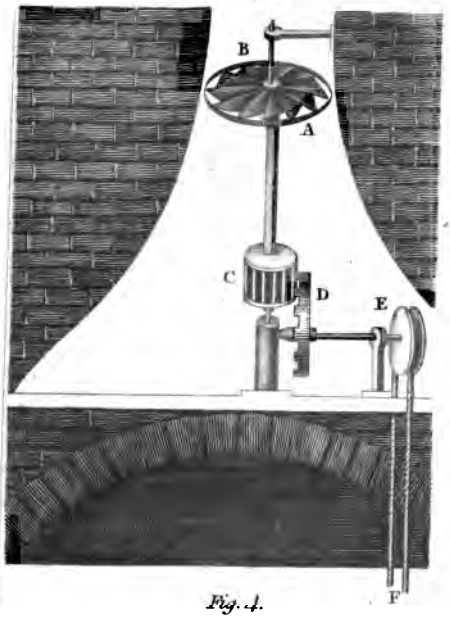

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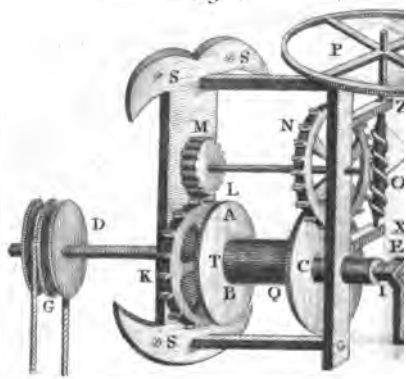

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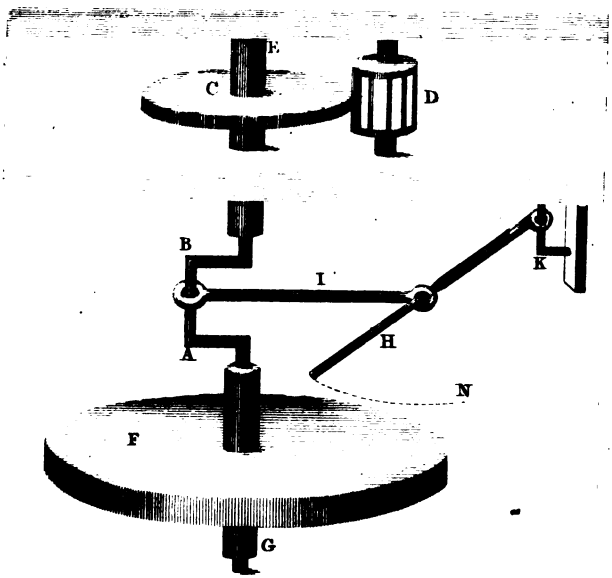

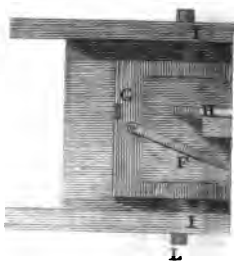

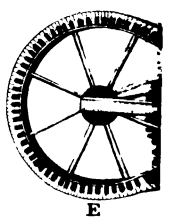

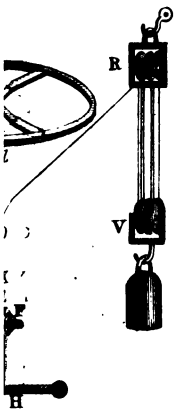

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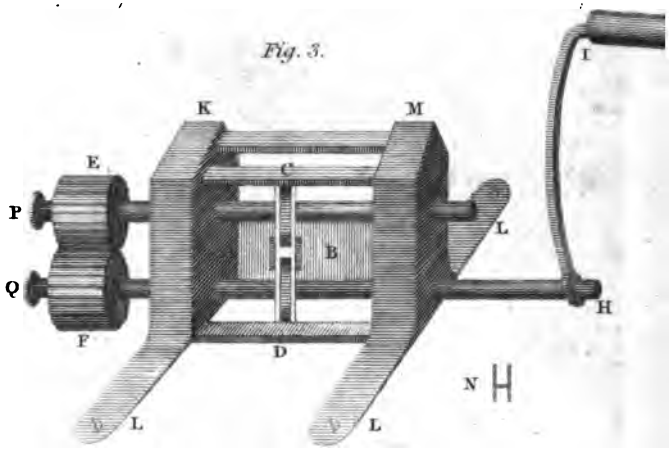

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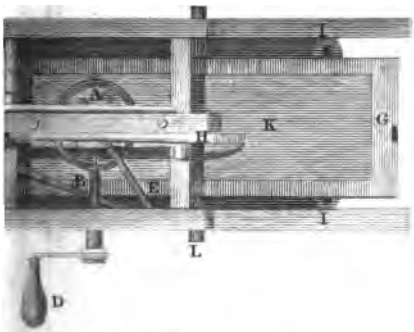

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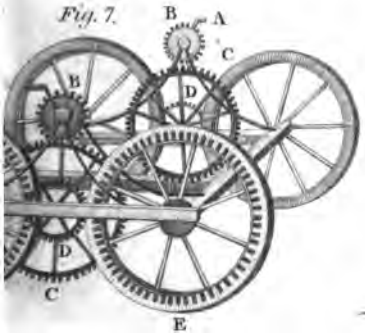

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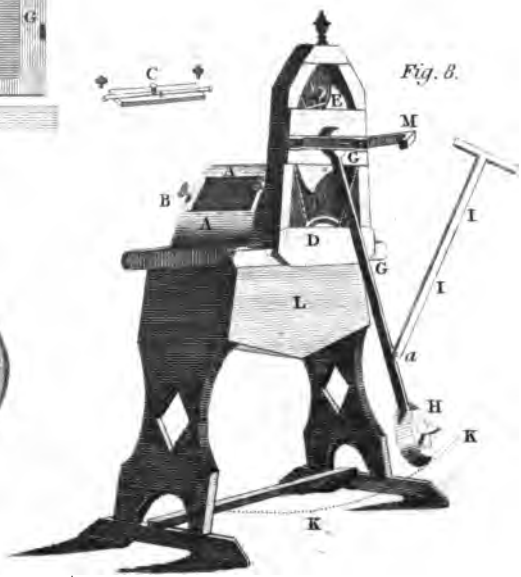

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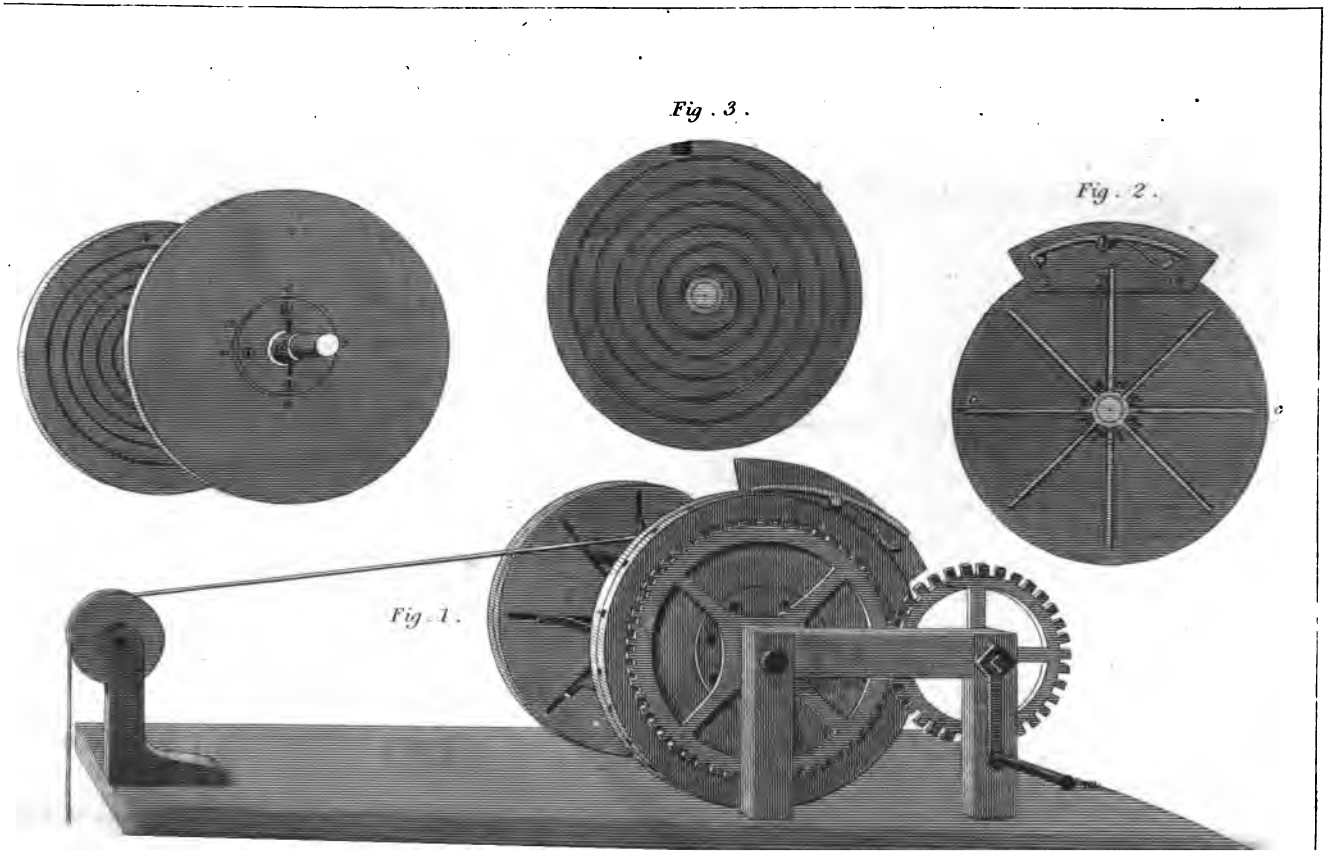
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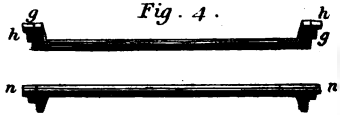

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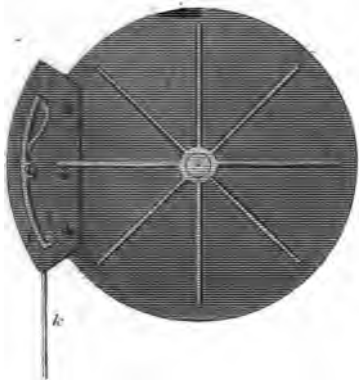

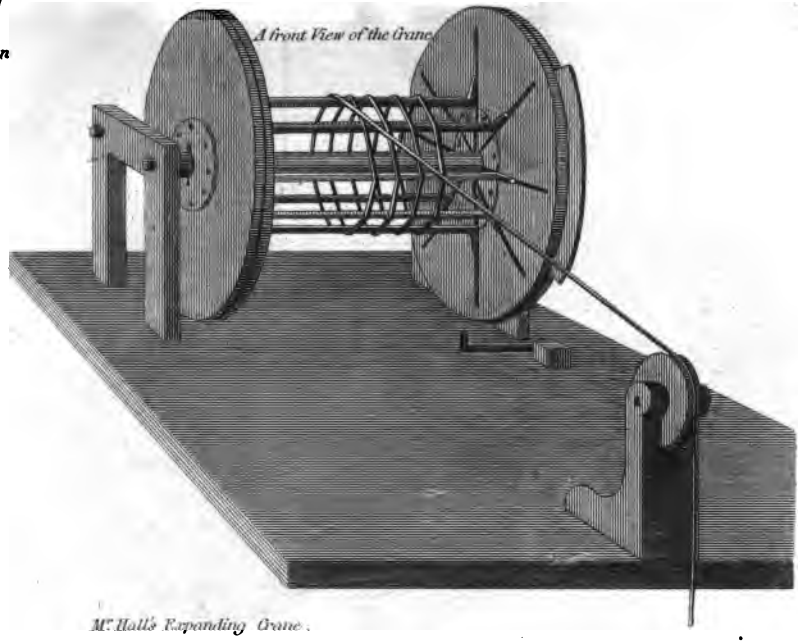

Mr. Hall's Expanding Crane.

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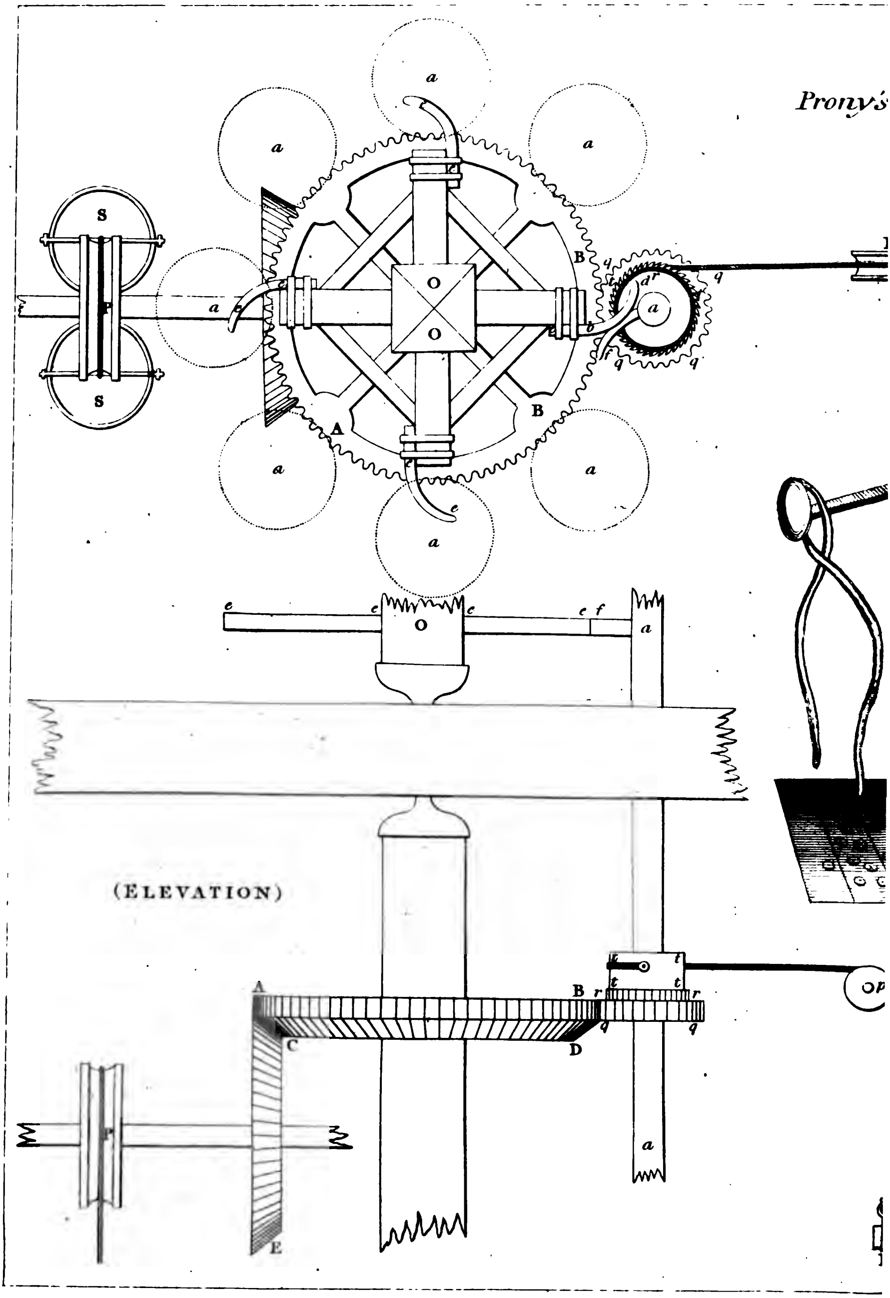
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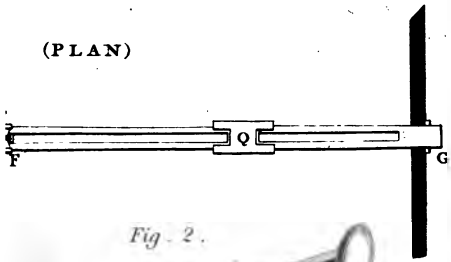

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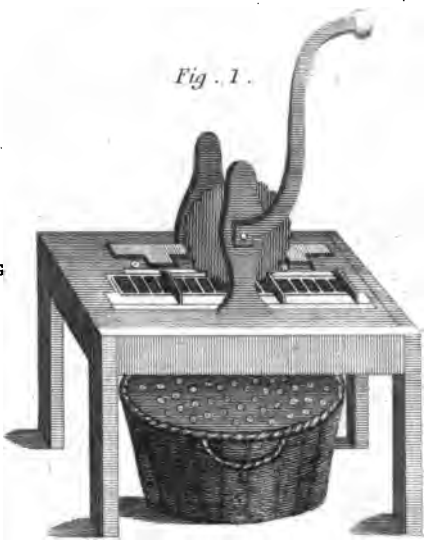

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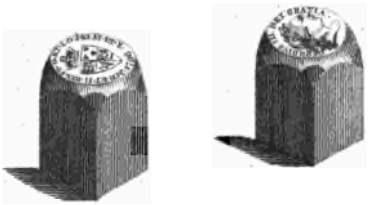

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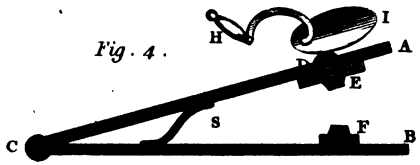

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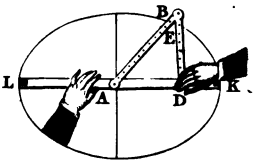

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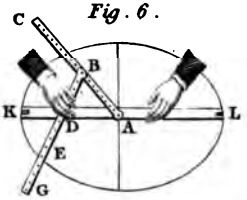

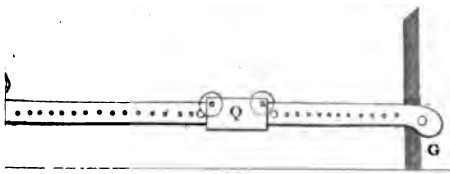

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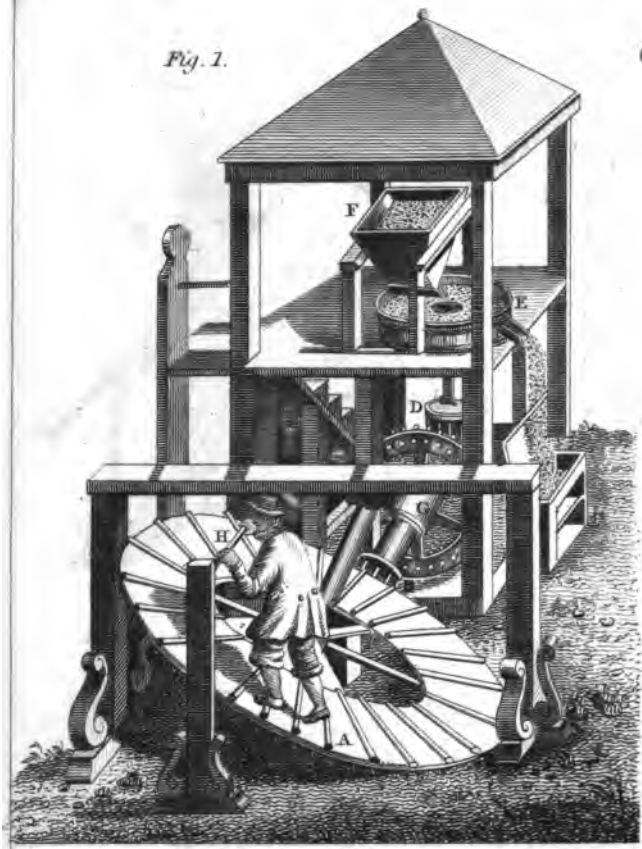

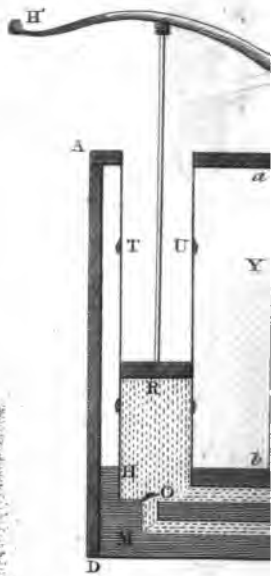

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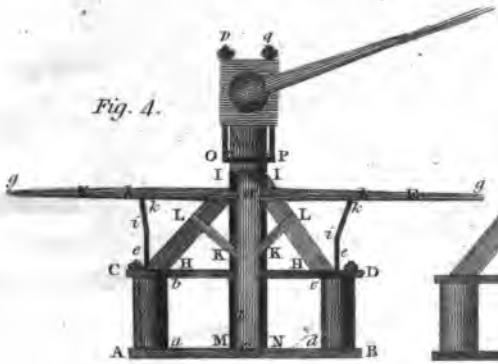

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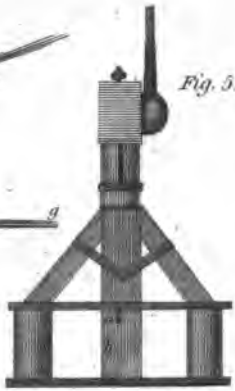

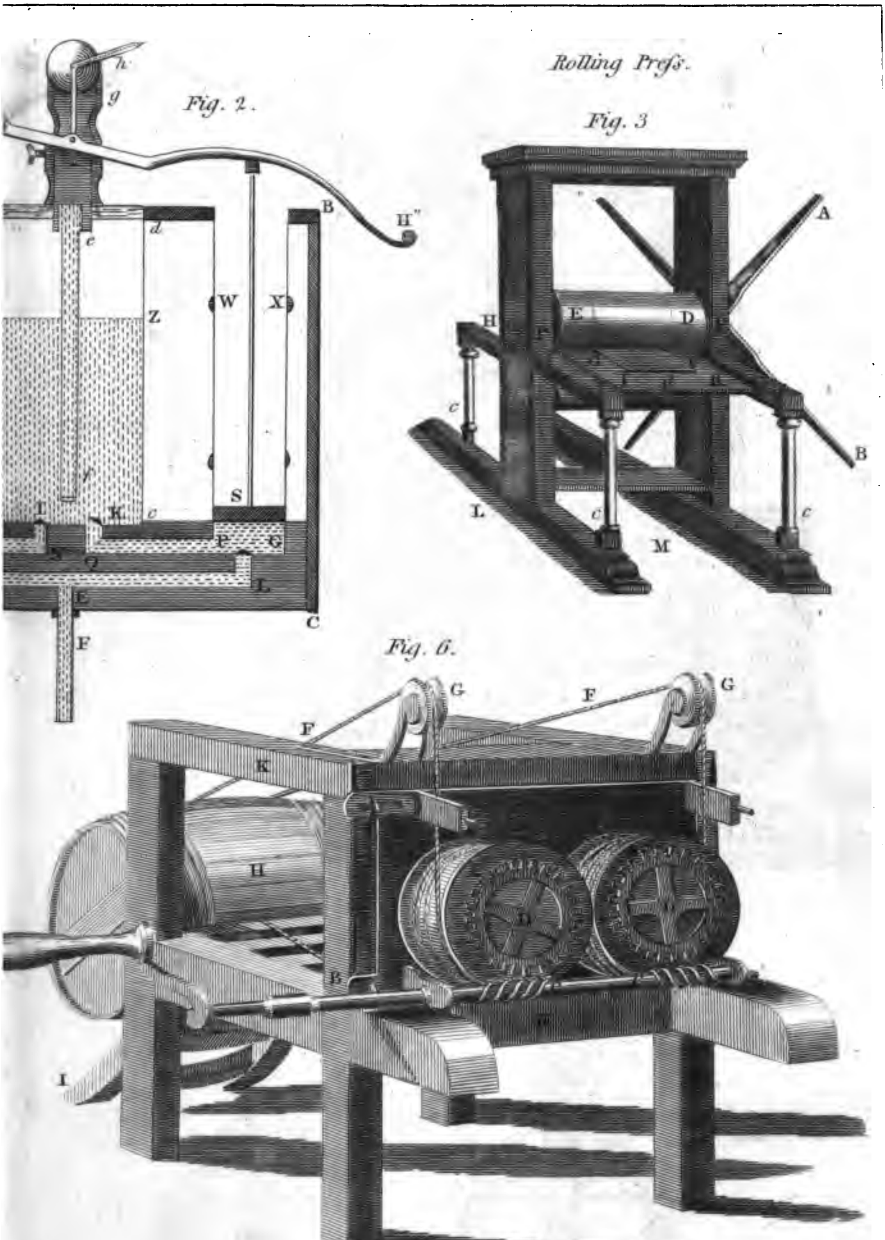

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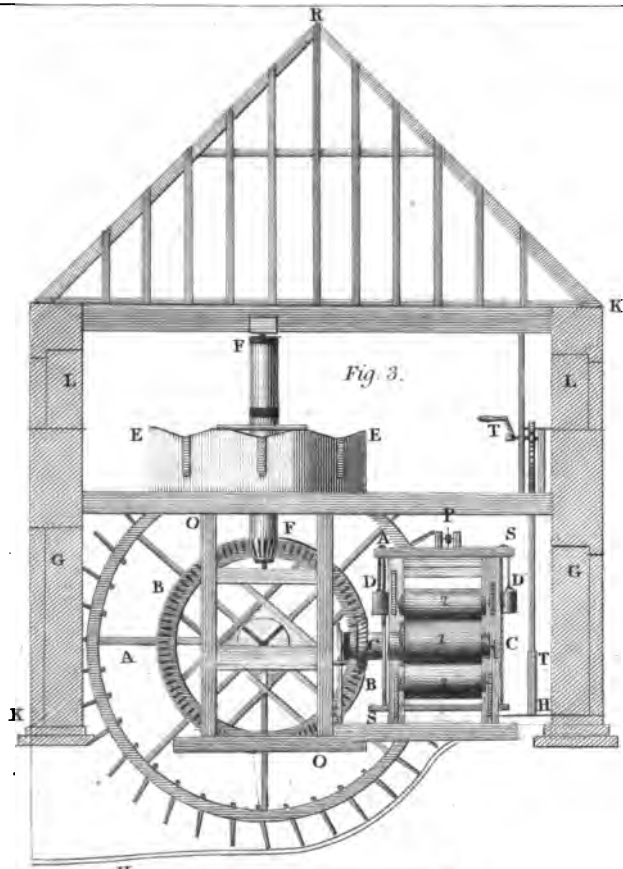
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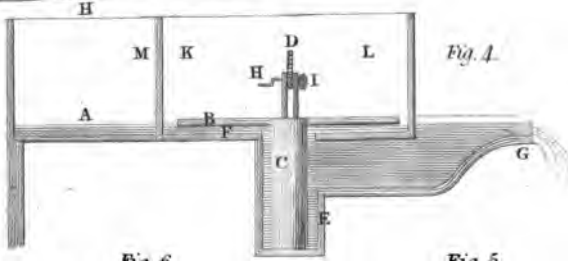
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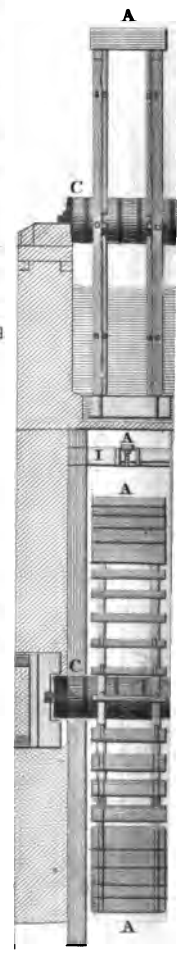
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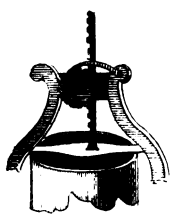

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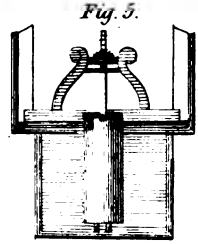

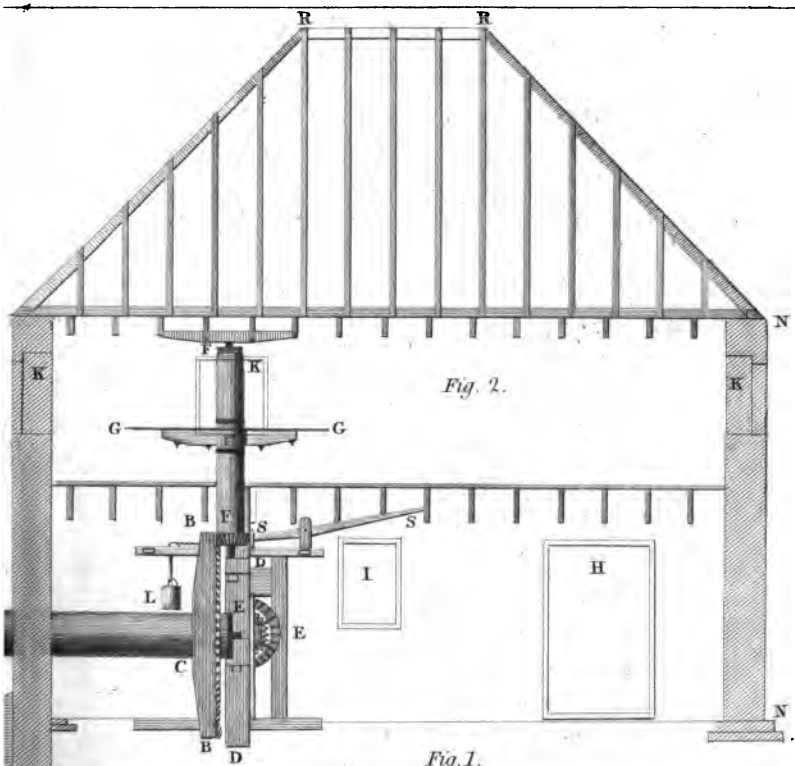

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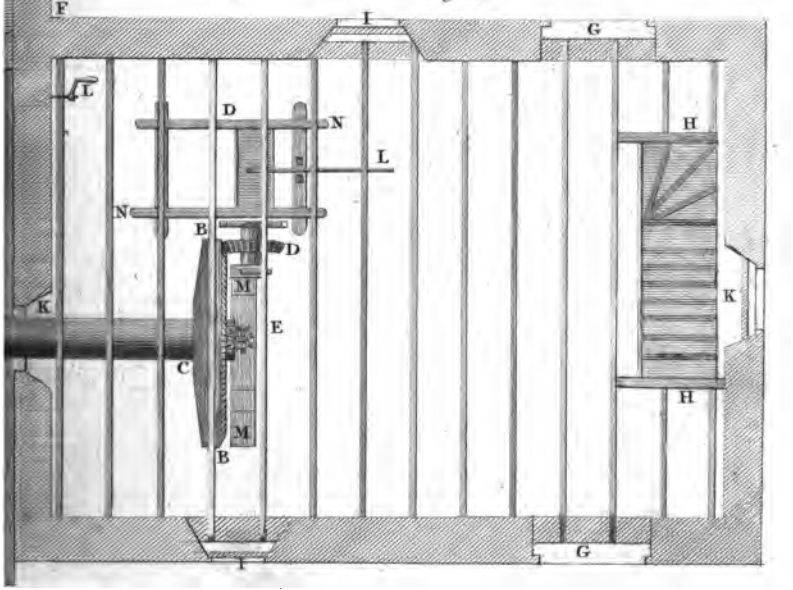

Mudow Sc. Ryfsell Co.

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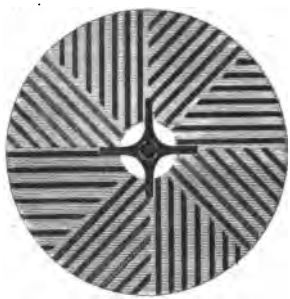

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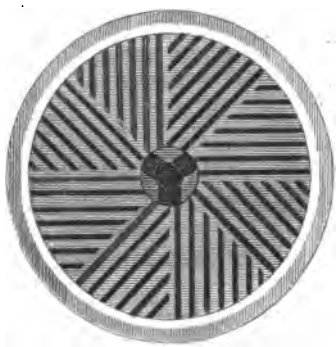

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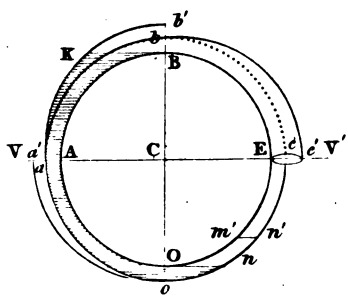

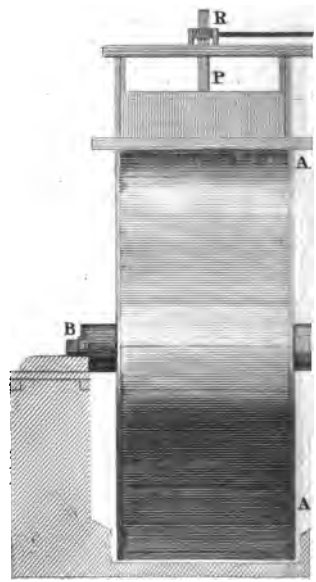

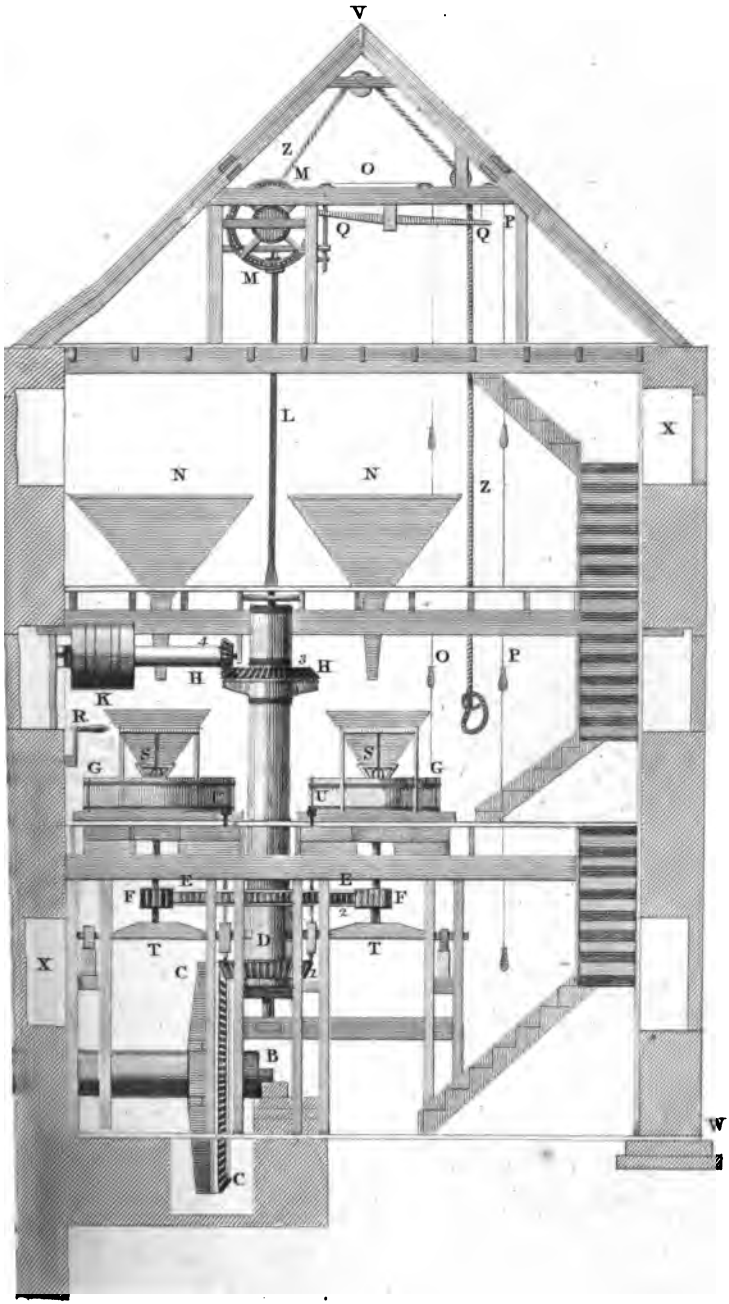

Meder Sc. Russell. Co.

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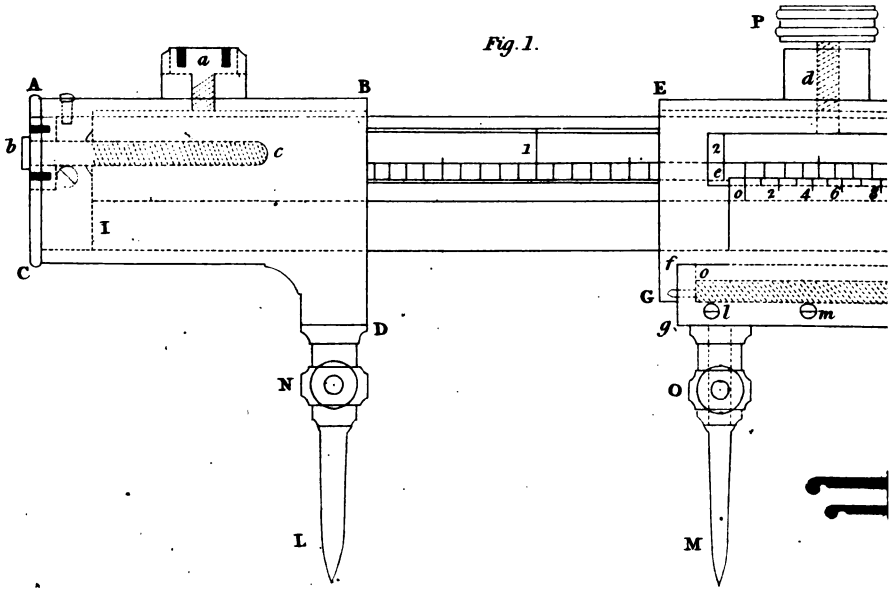

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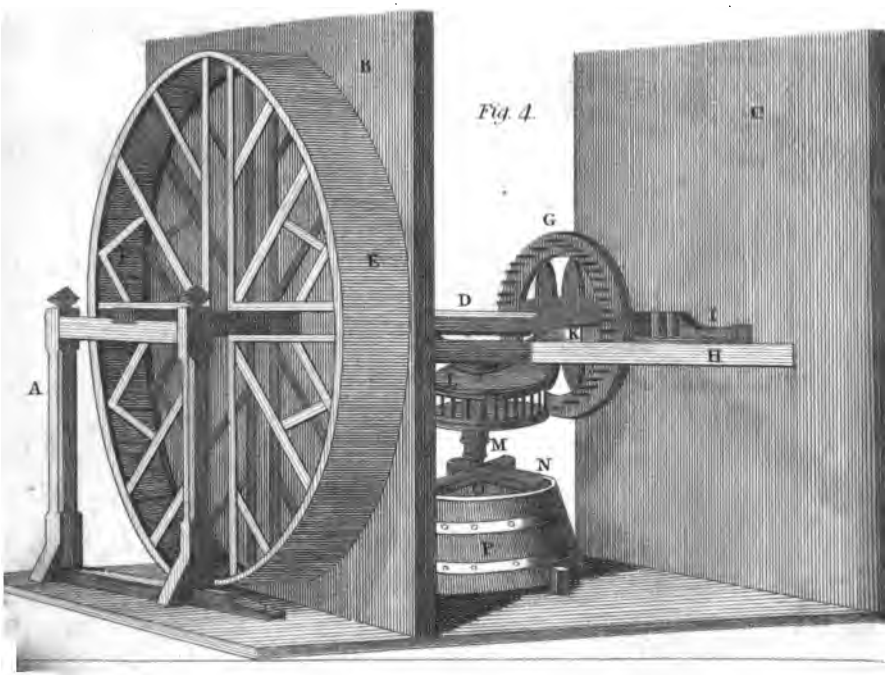

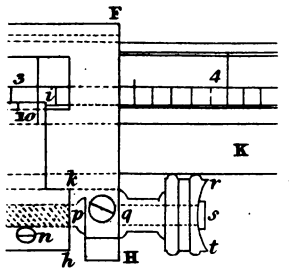

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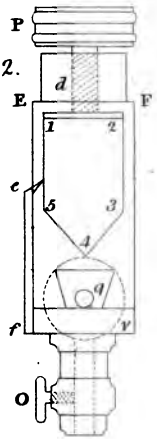

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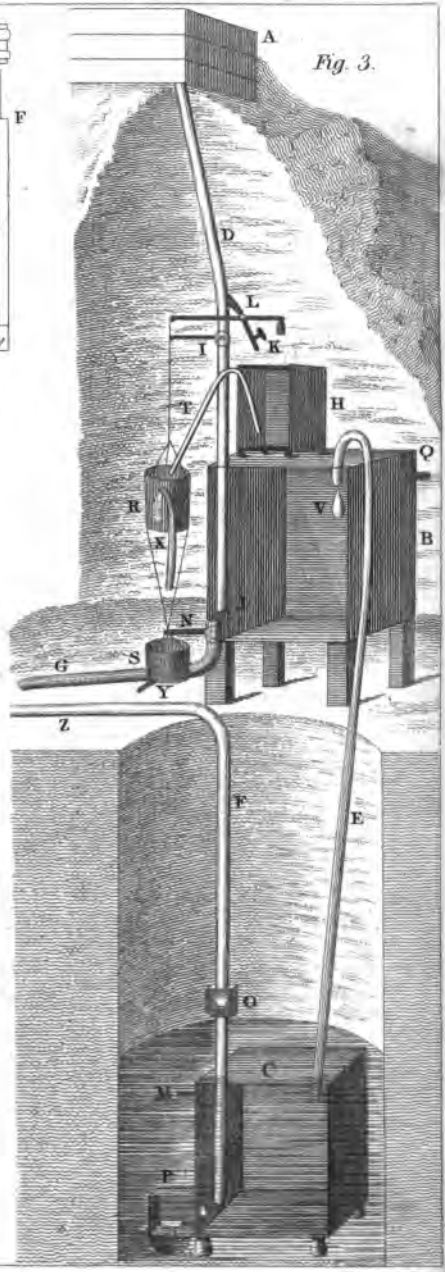

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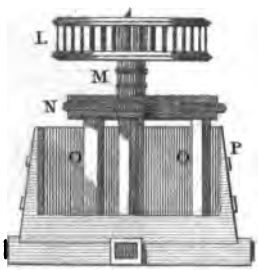

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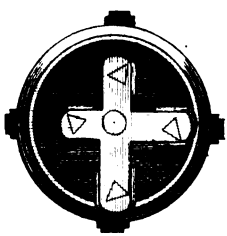

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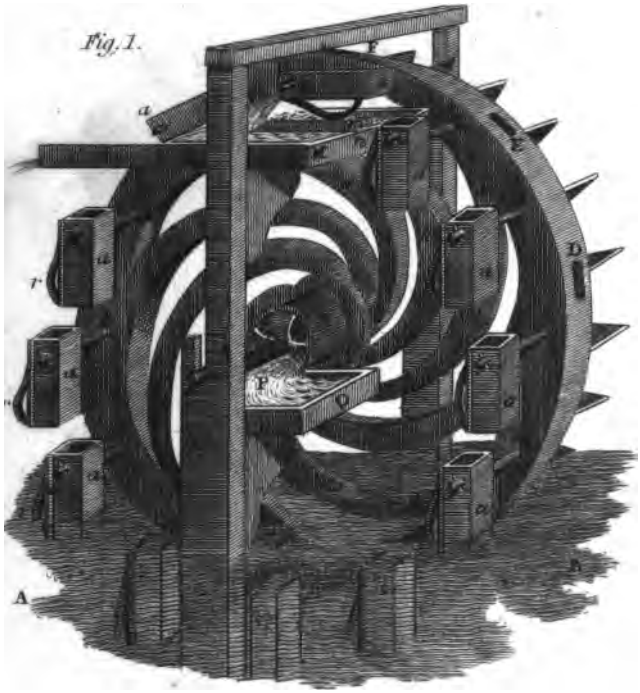

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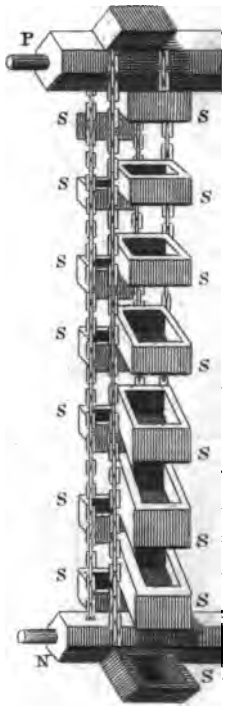

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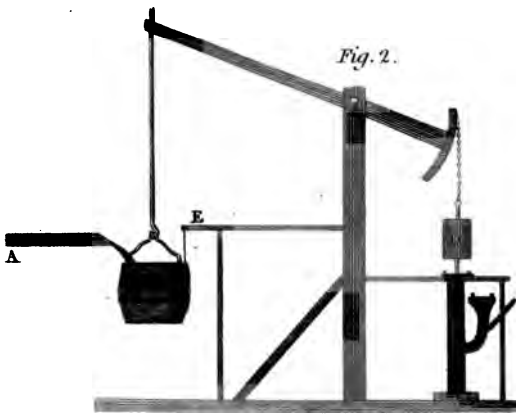

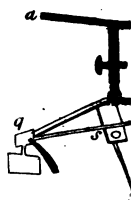

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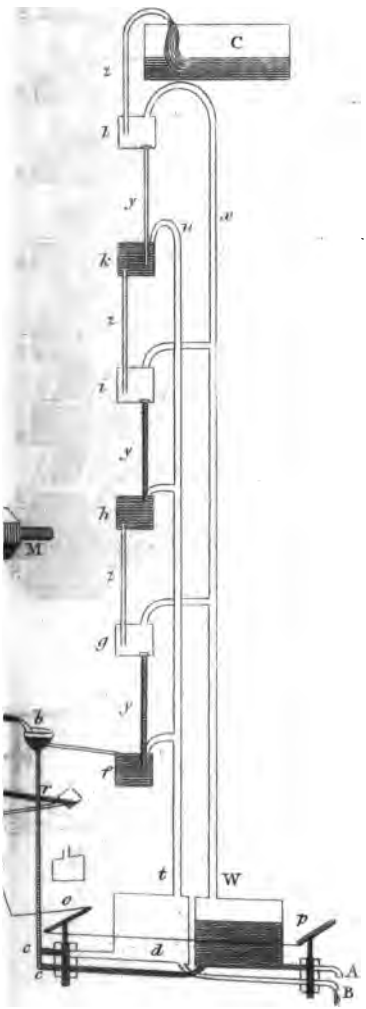

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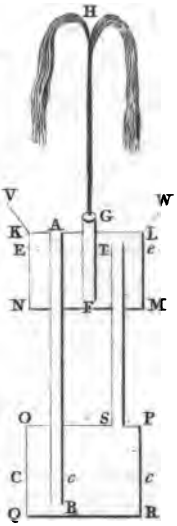
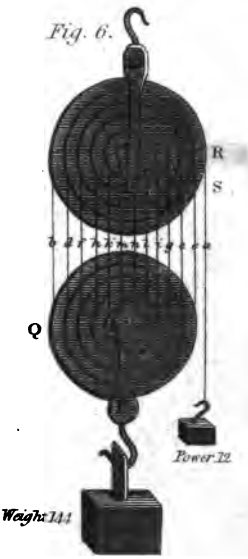


Fig. 6.



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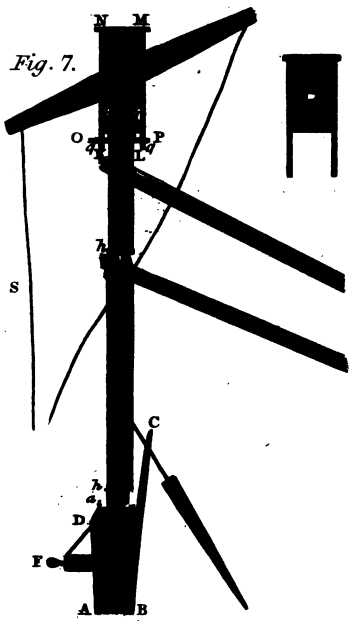

Fig. 8.

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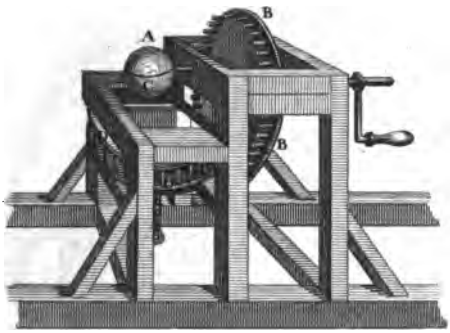

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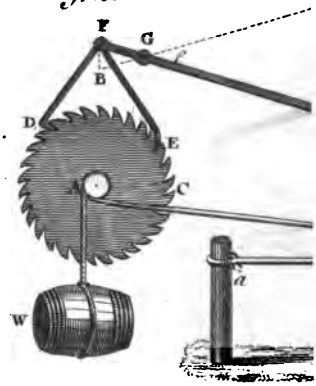

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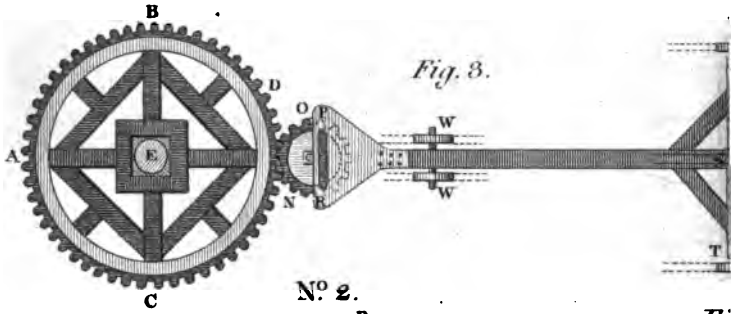

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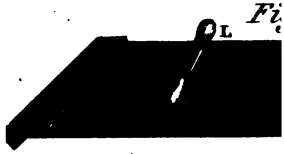

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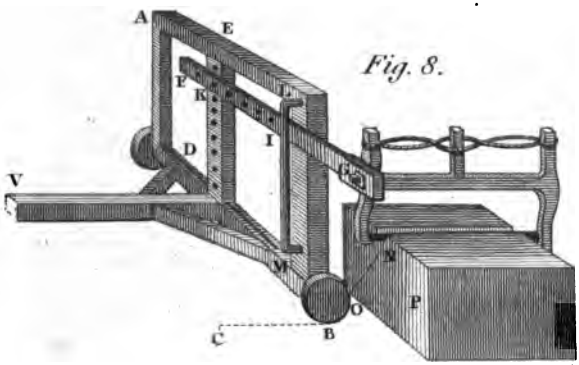

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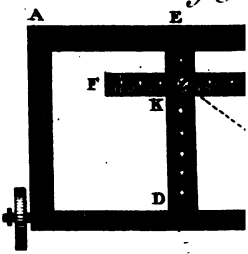

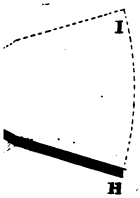

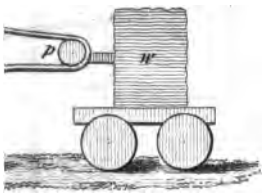

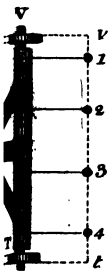

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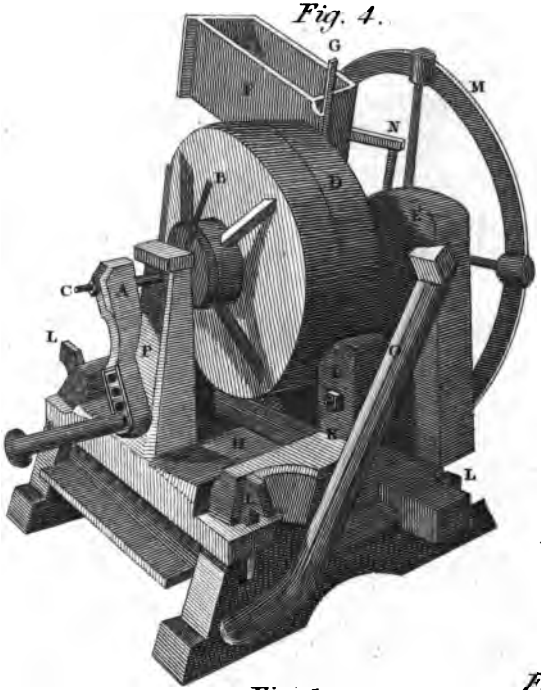

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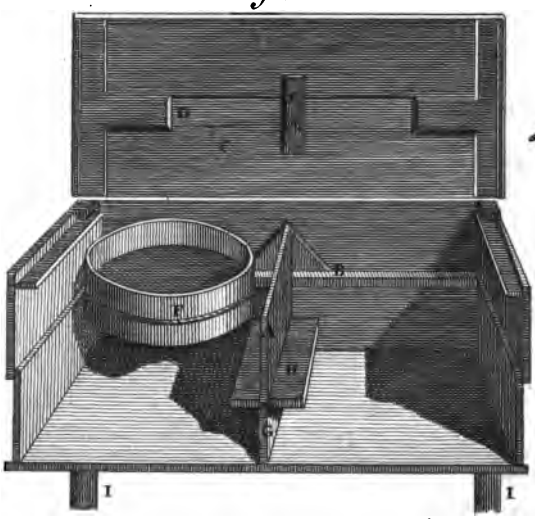

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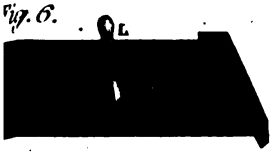

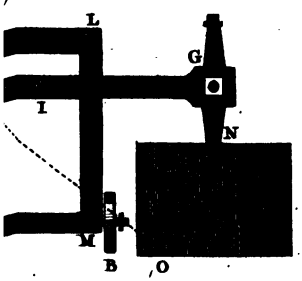

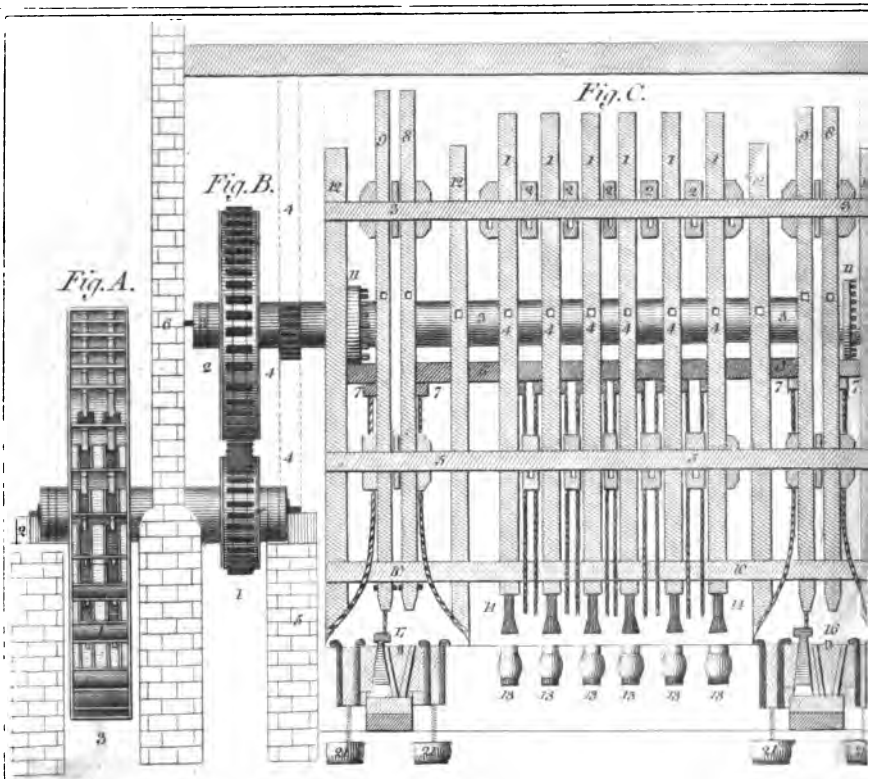

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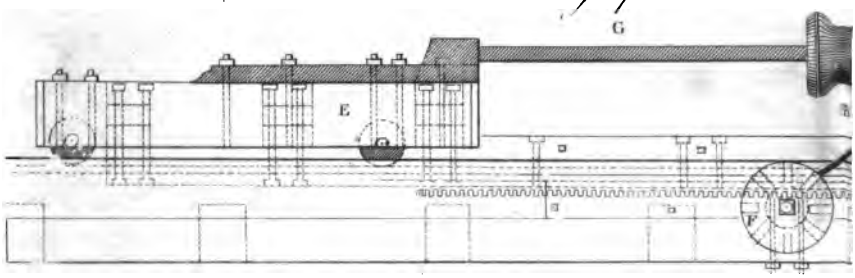

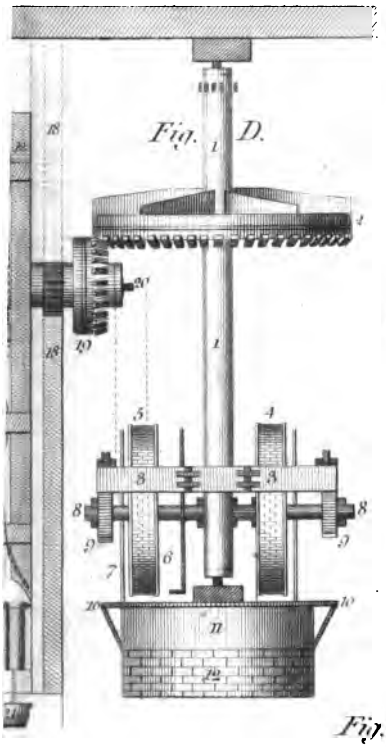
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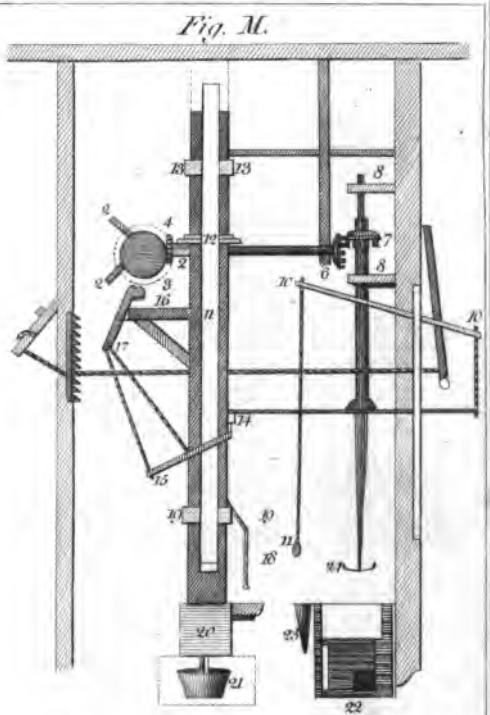
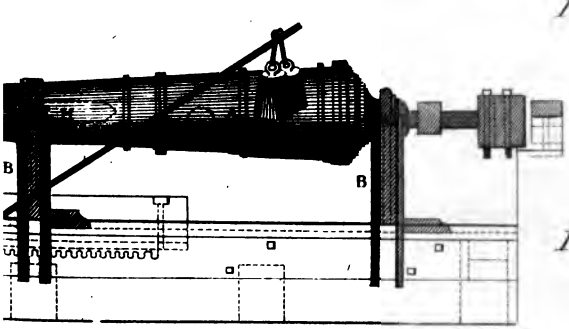


Fig. M.

Fig. O.

Fig. P.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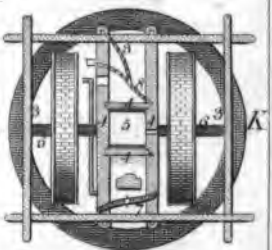
Fig. K

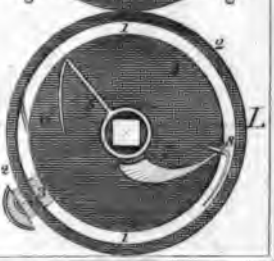
Fig. L

Fig. 2.

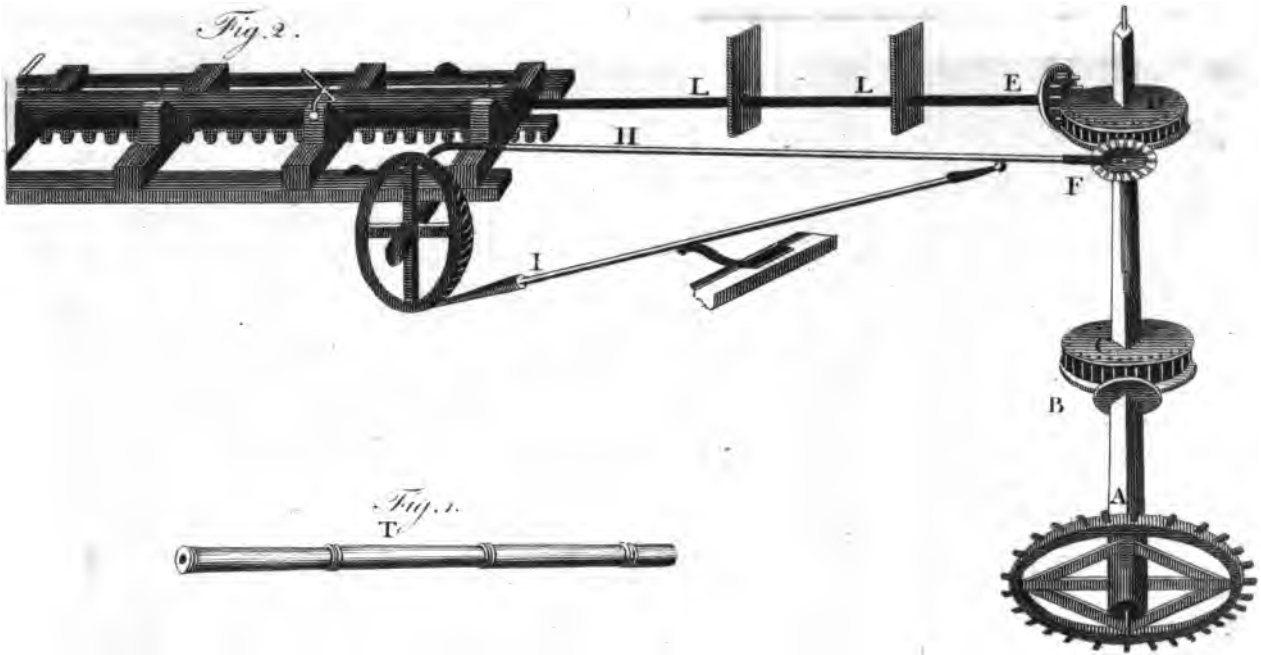

Fig. 1.

Buncis PILE Engine

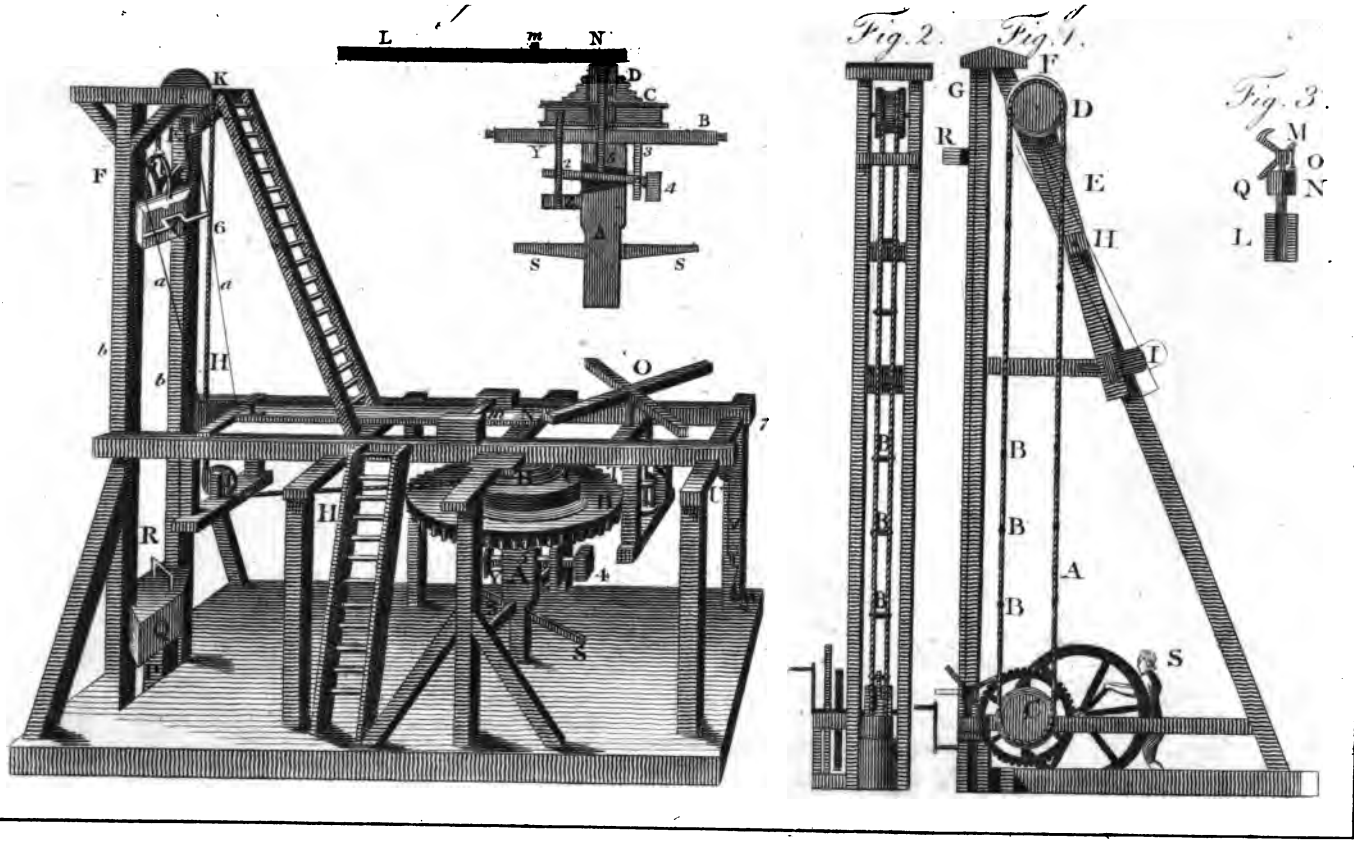
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Fig. 2.
Fig. 1.
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Fig. 3.
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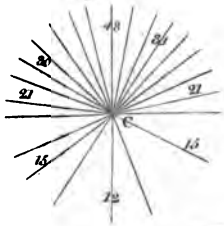
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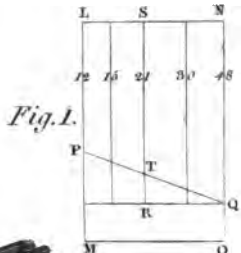
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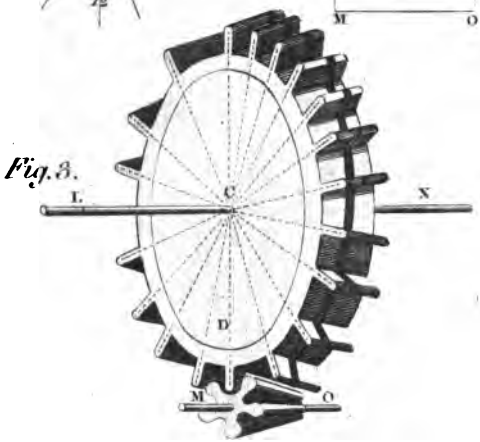
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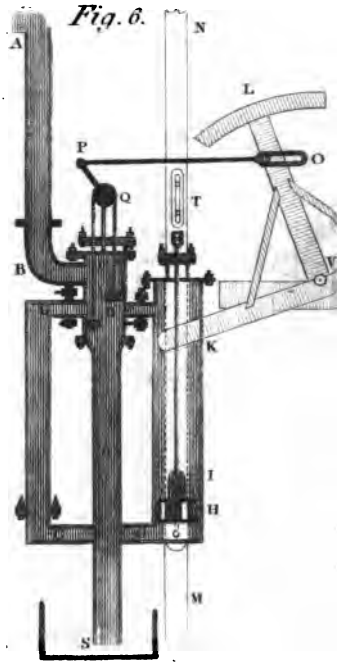
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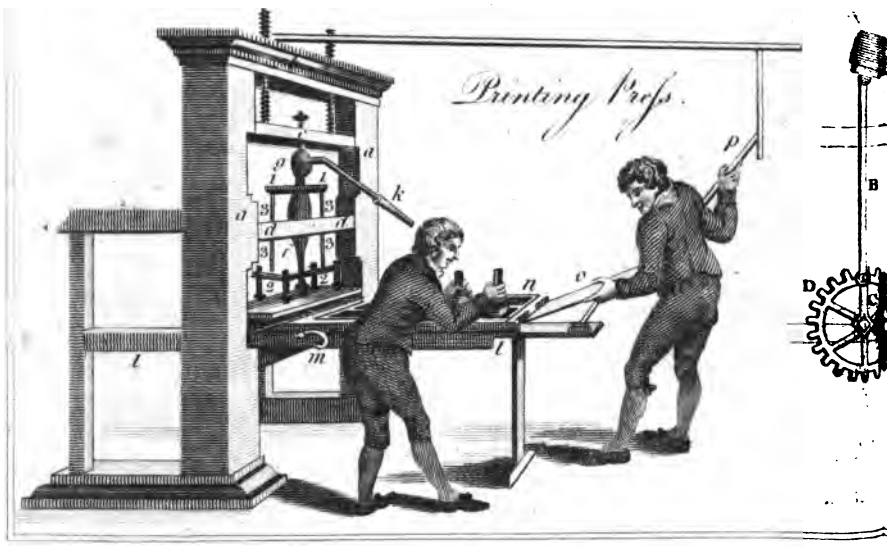
Printing Press.
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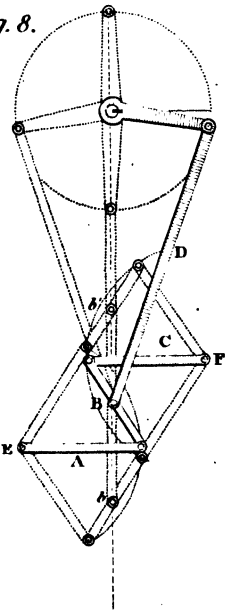
Fig. 8.



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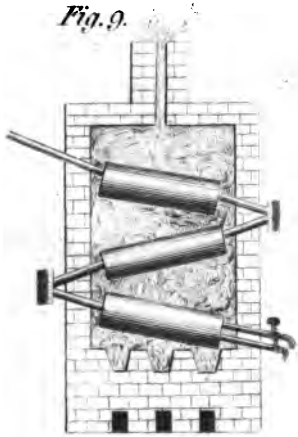

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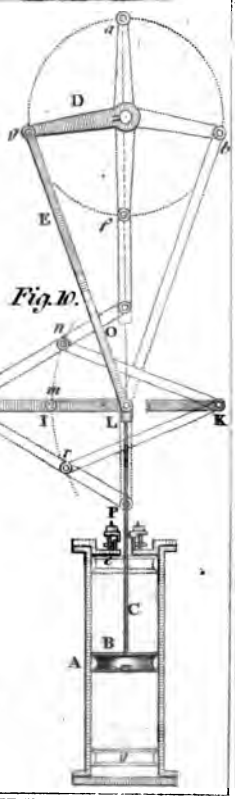

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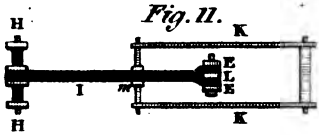

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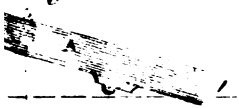

Fig. 10.

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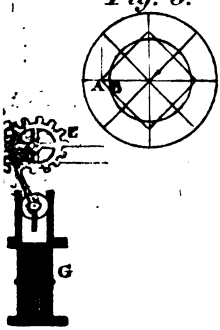

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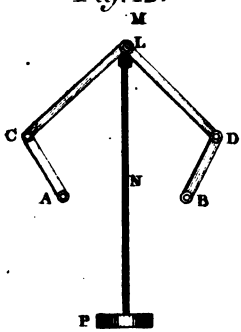

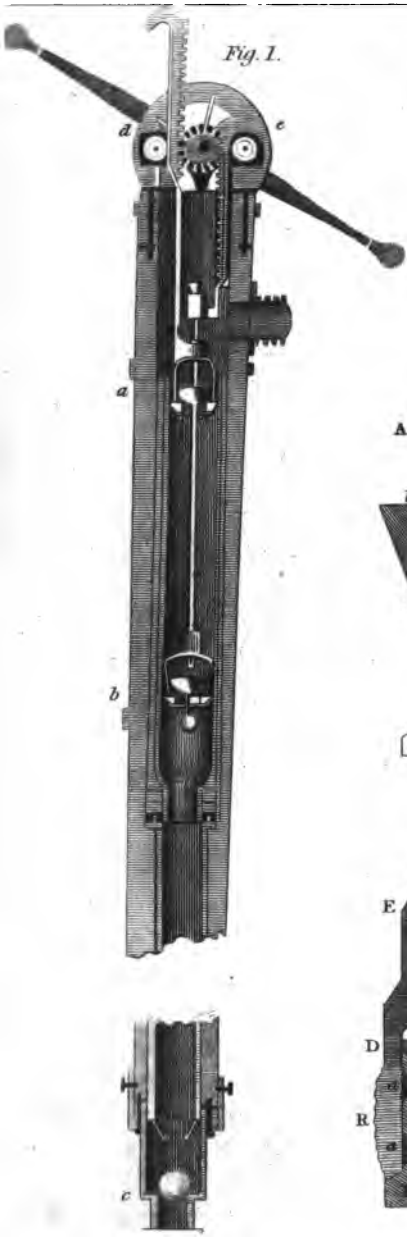
Fig. 1.
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Fig. 2.
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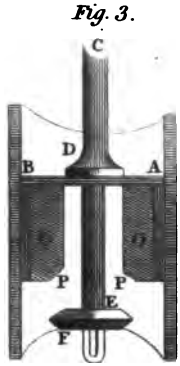
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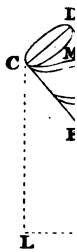
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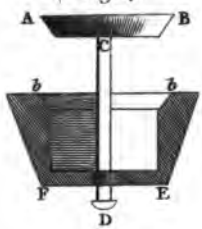
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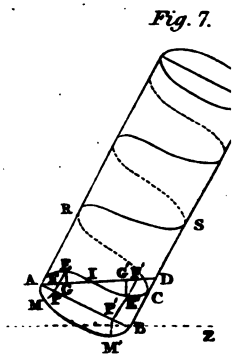
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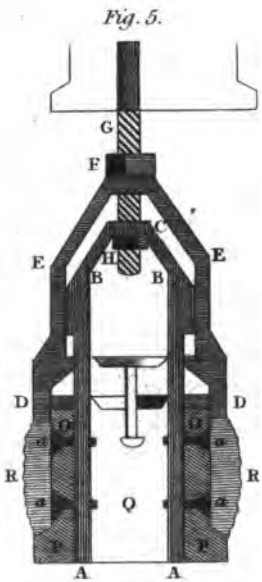
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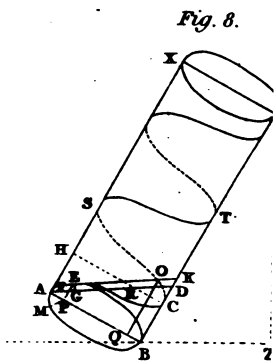
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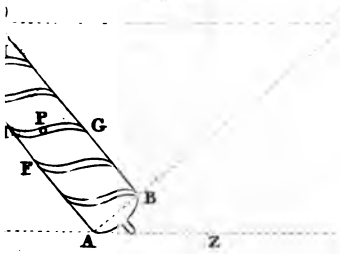
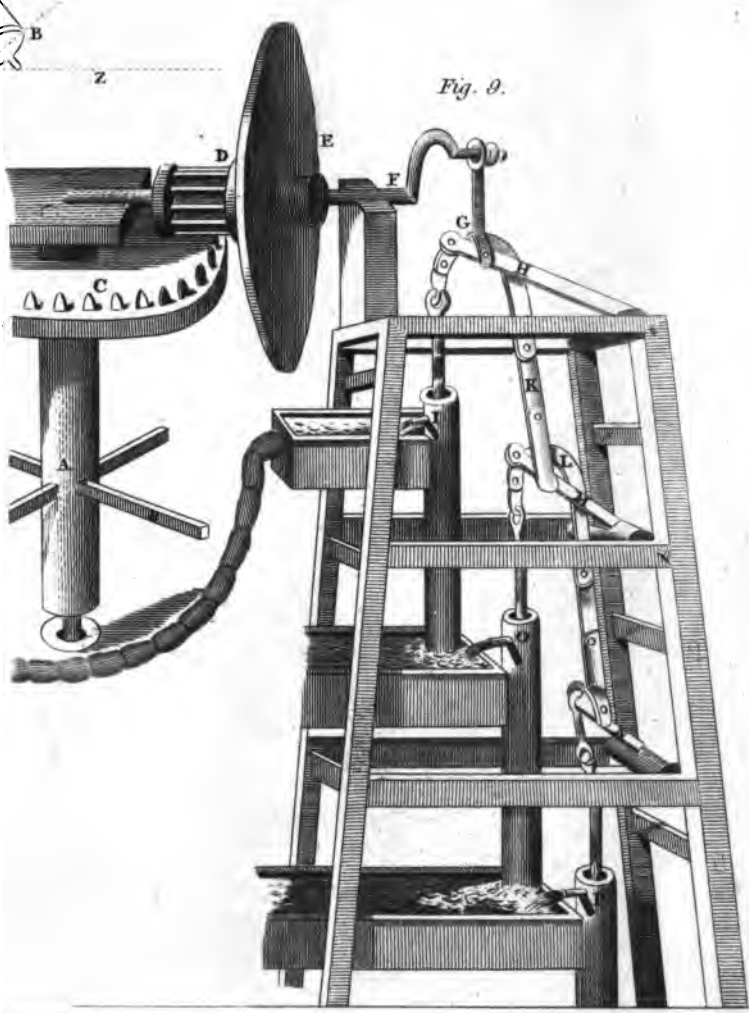
Fig. 6.



Bockler's Triple Pump.

Fig. 9.



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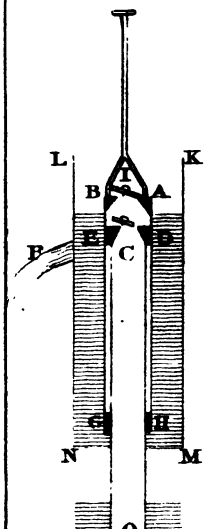

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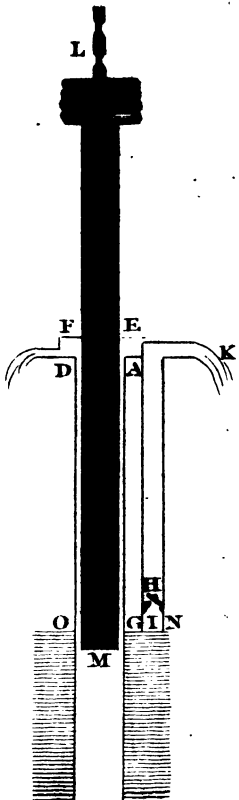

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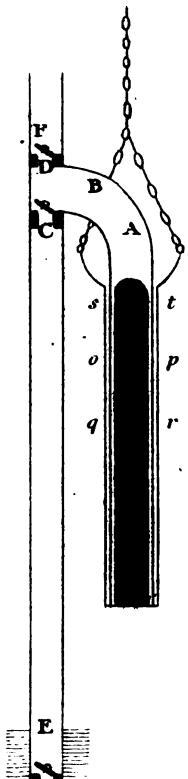

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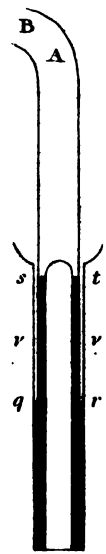

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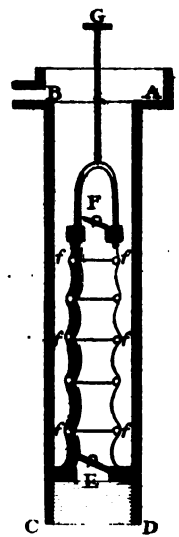
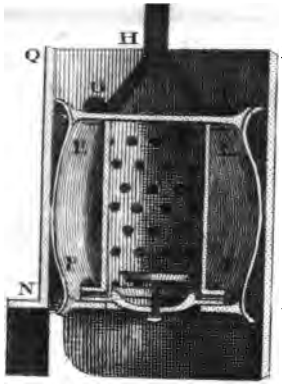
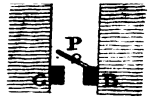


Fig. 22.

Fig. 25.





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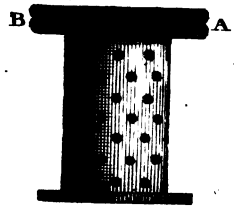

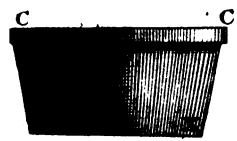

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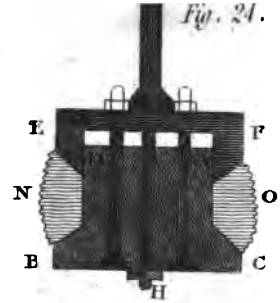

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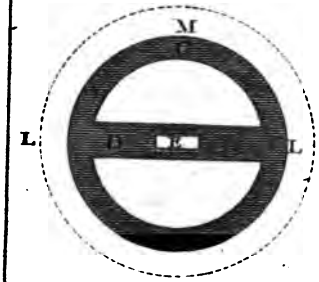

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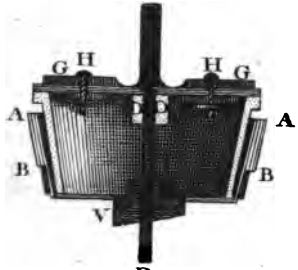
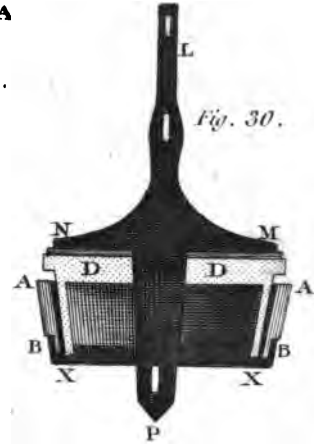


Fig. 28.

Fig. 29.

Fig. 30.



Ramsden's Machine for dividing Mathematical Instrum

Fig. 1.

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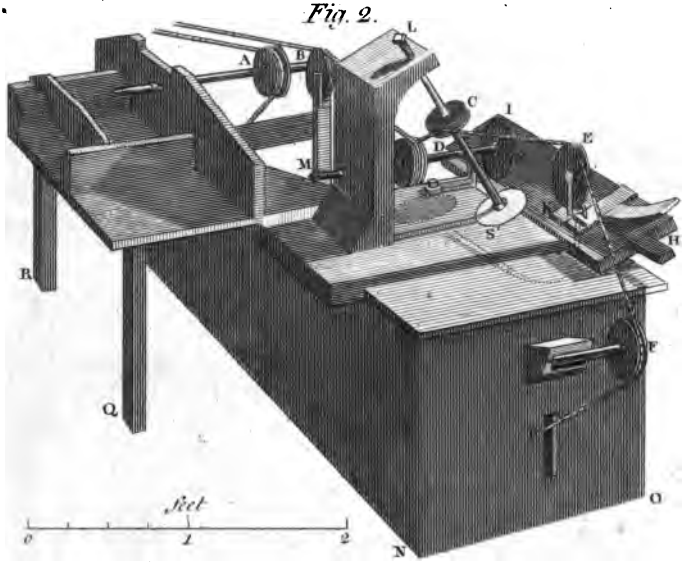
Fig. 2.



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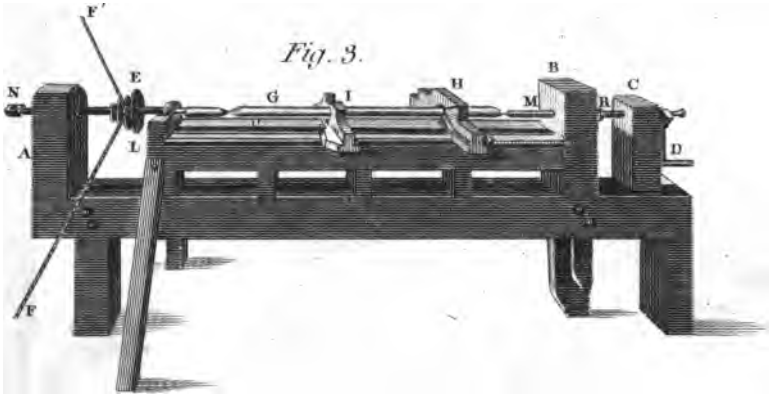

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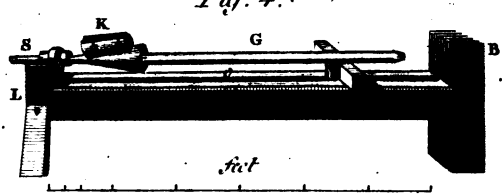
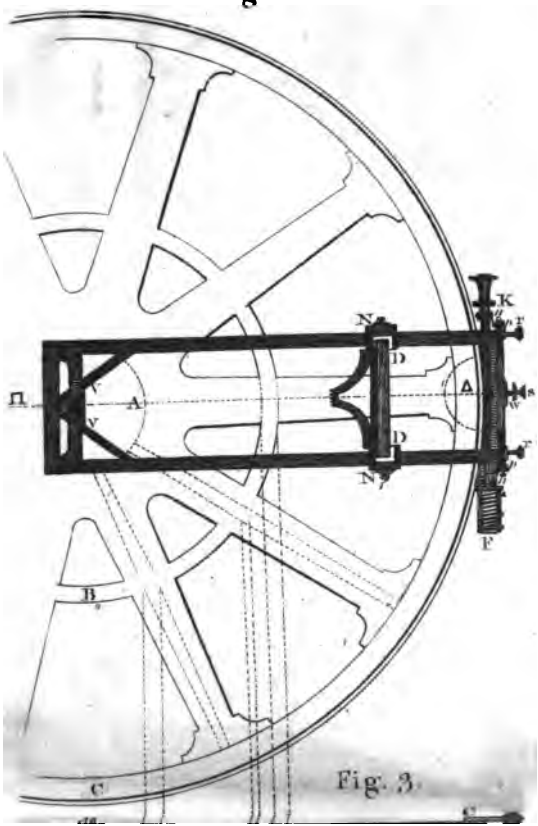


Barlow sculp.

Fig. 2.



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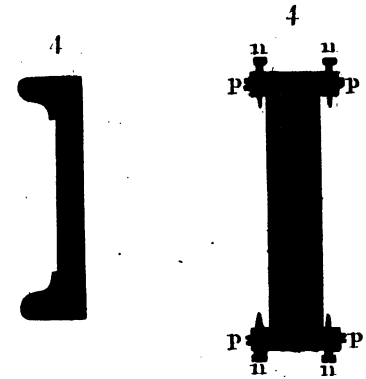
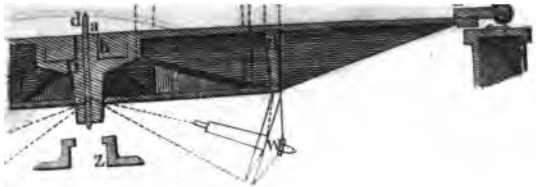


Fig. 4.

Fig. 5.



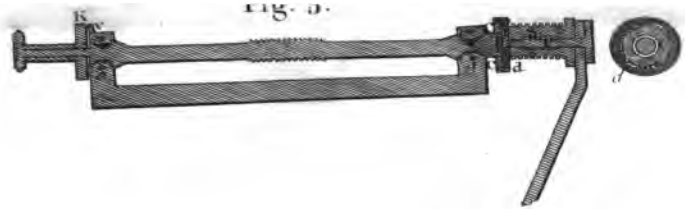
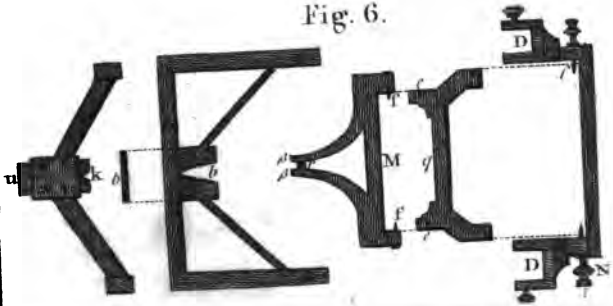


Fig. 7.

Fig. 6.



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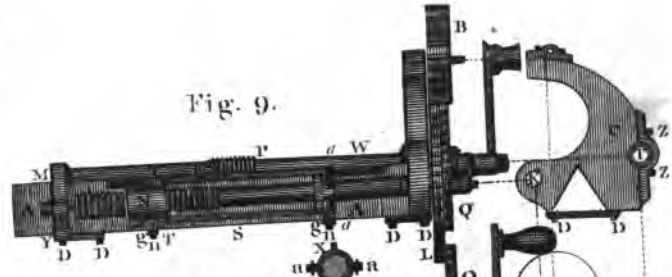

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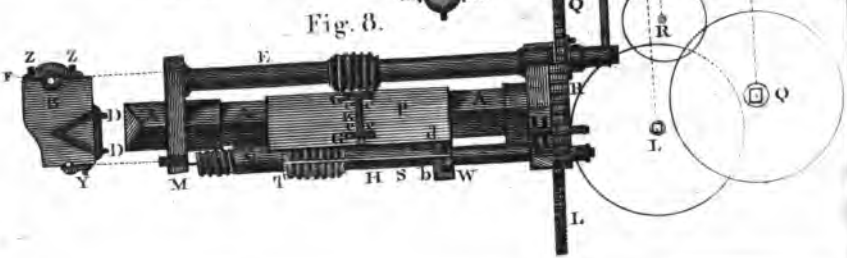

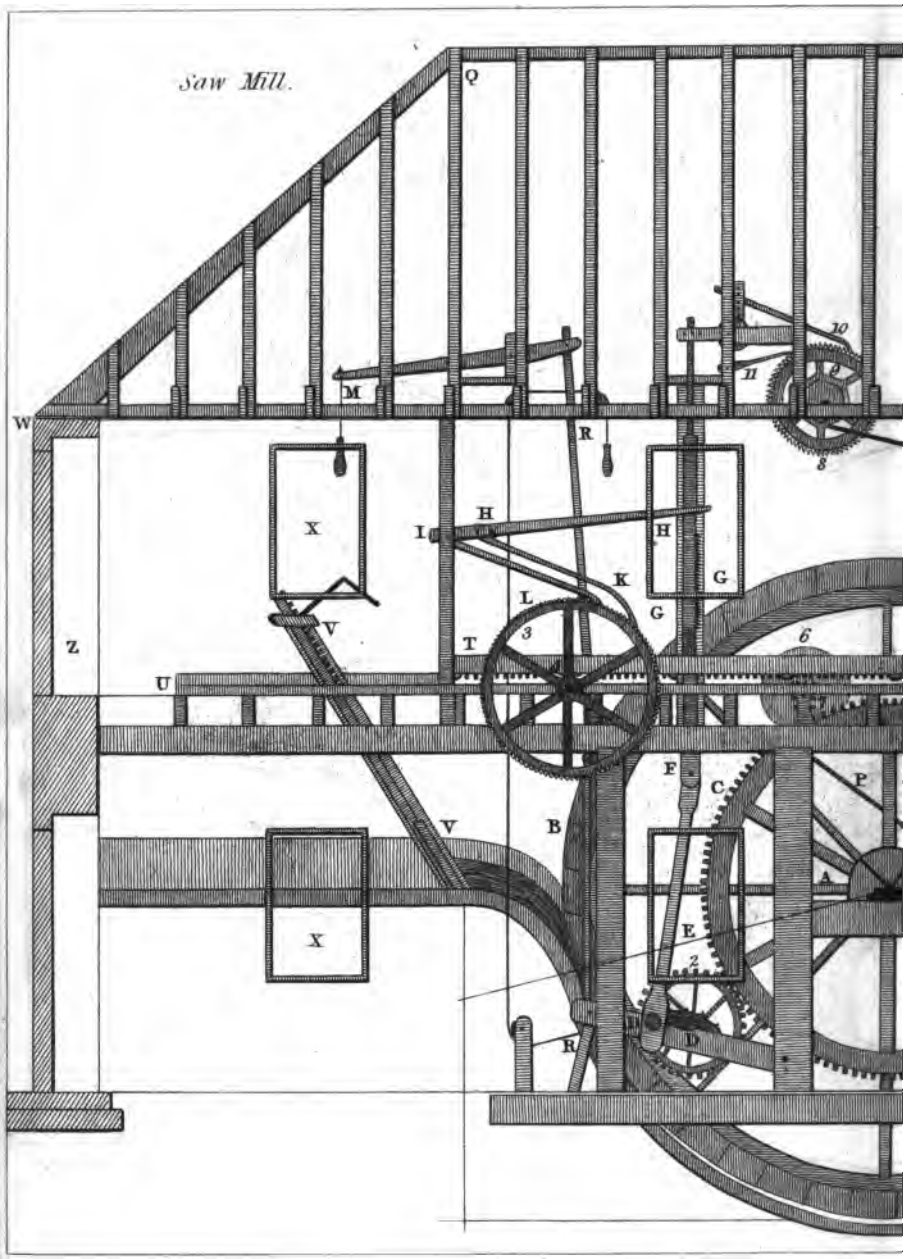
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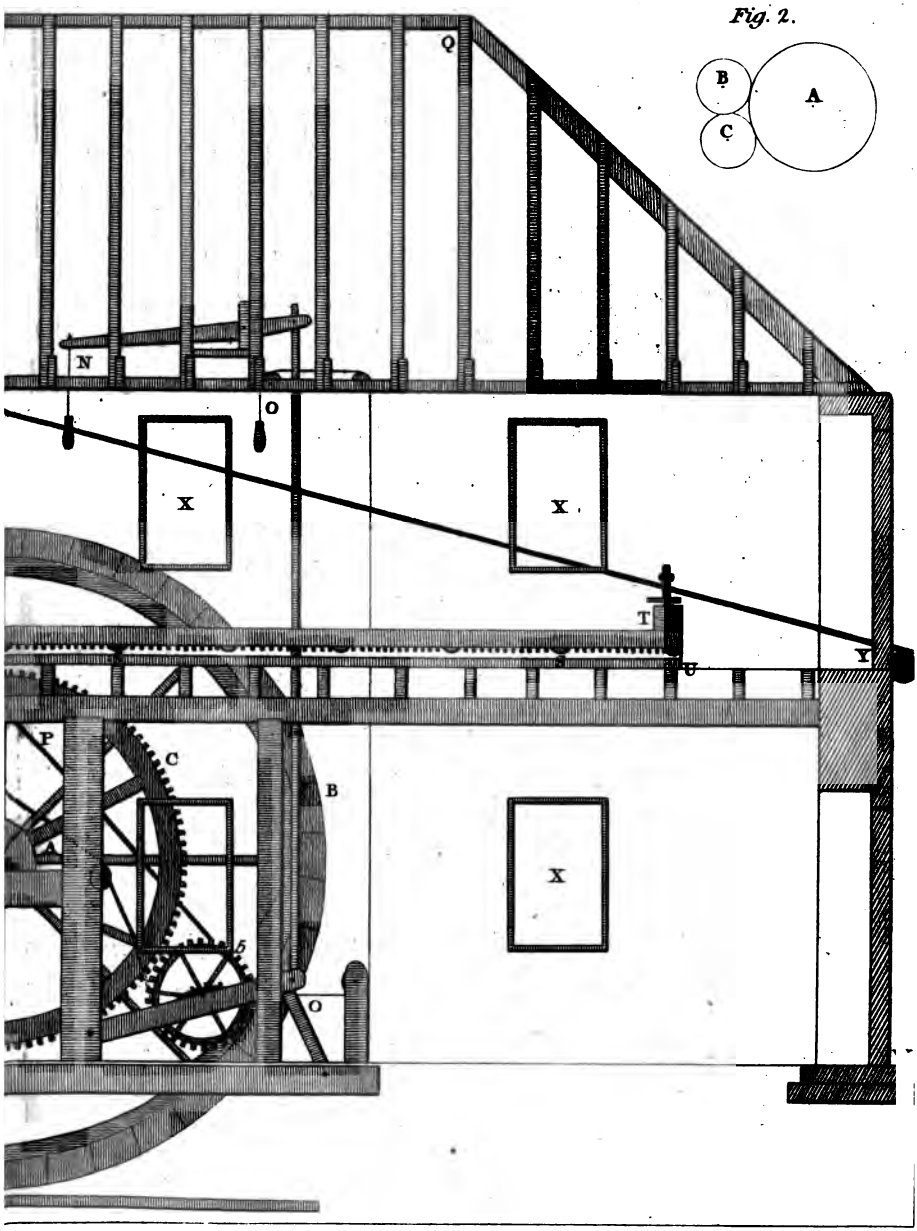
Fig. 2.
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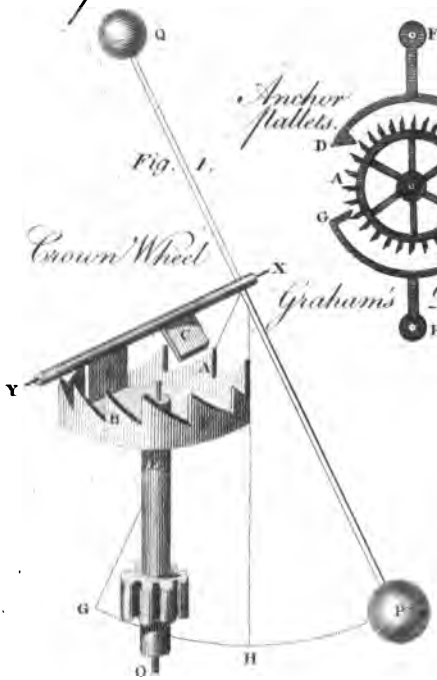


Fig. 2.

Fig. 3.

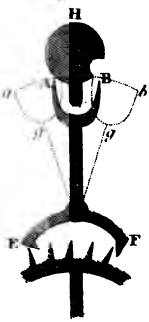
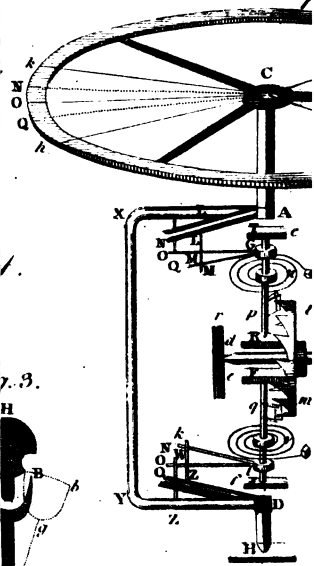


Fig. 7.

Free or detached lo



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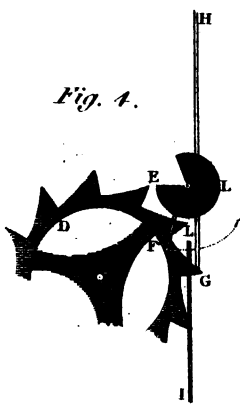
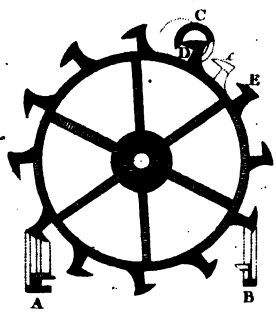


Fig. 5. Horizontal.



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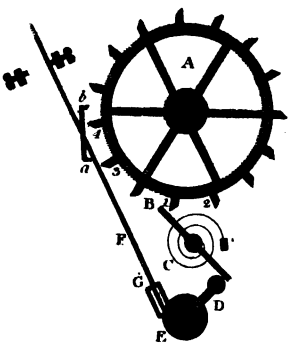
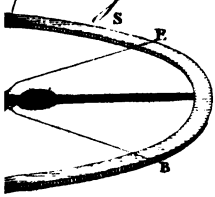


Fig. 8.

Mudge's Escapement for a Pendulum.

by Mudge.



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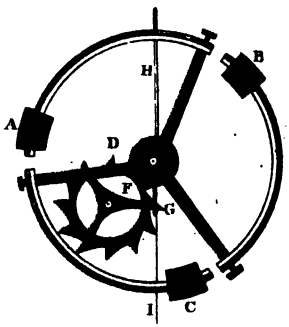


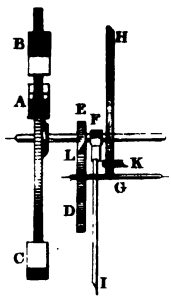
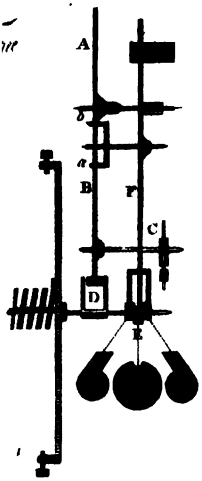


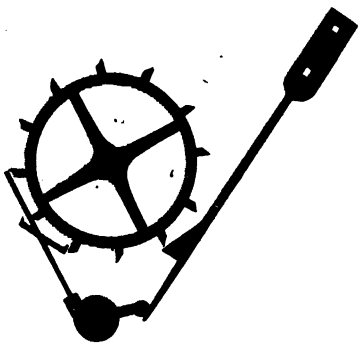
Fig. 10.

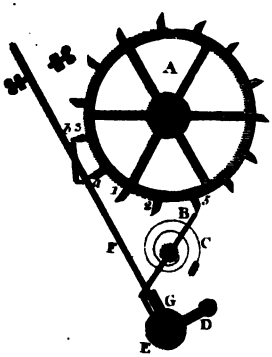
Escapement by De Passons.

Fig. 11.

Fig. 12.







Barlow sculp.

Fig. 1

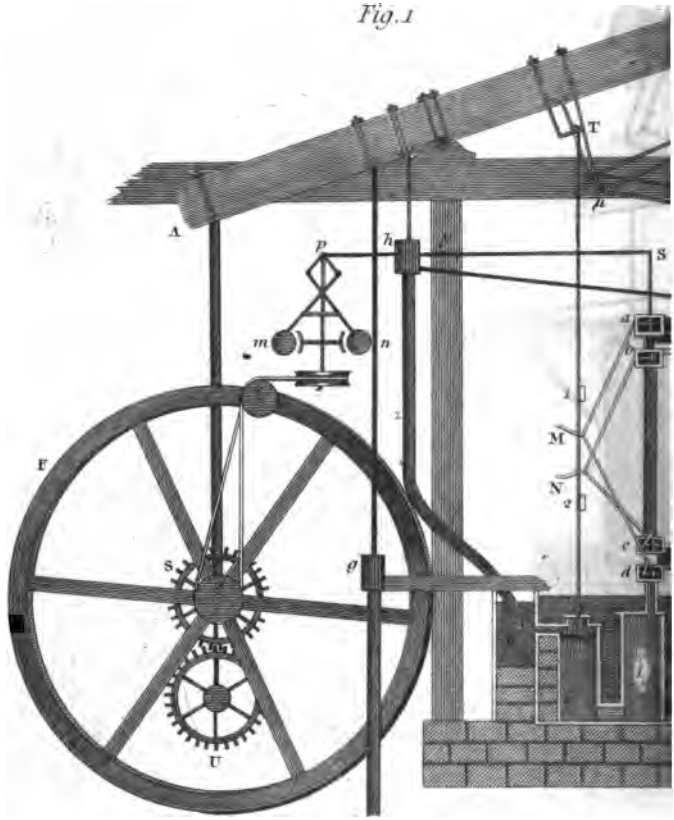
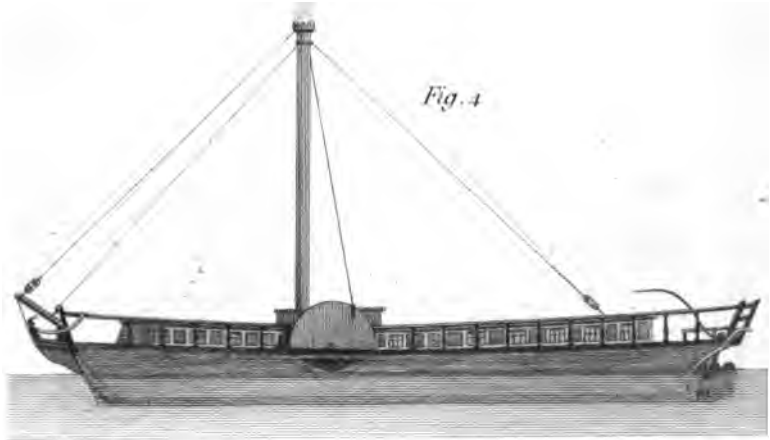


Fig. 4



Eduction Valve

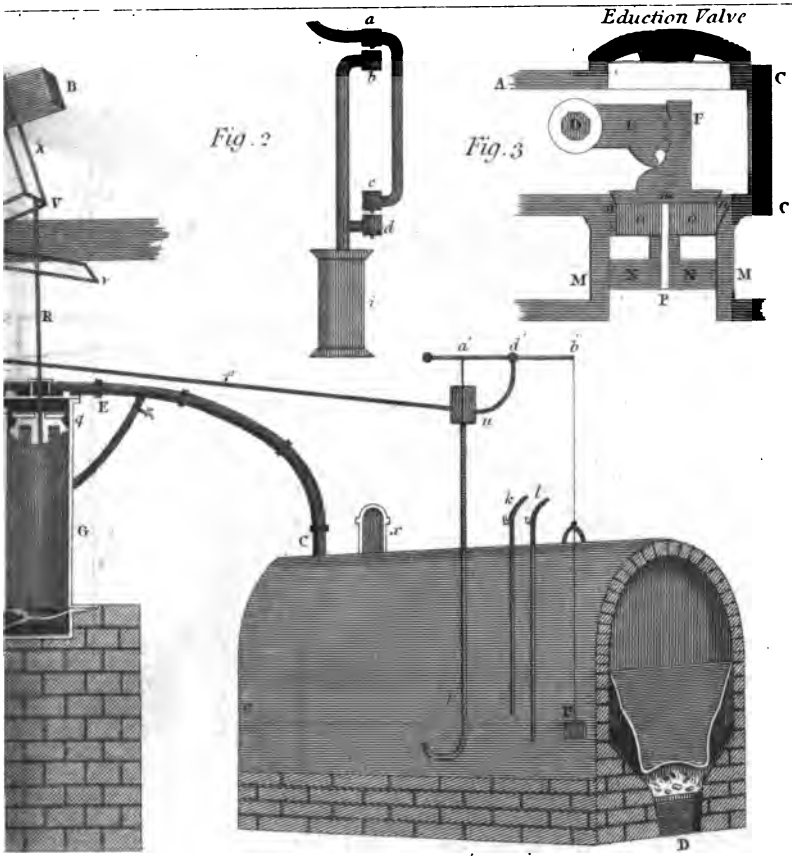
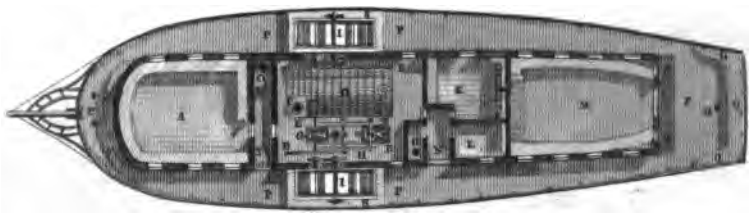


Fig. 5



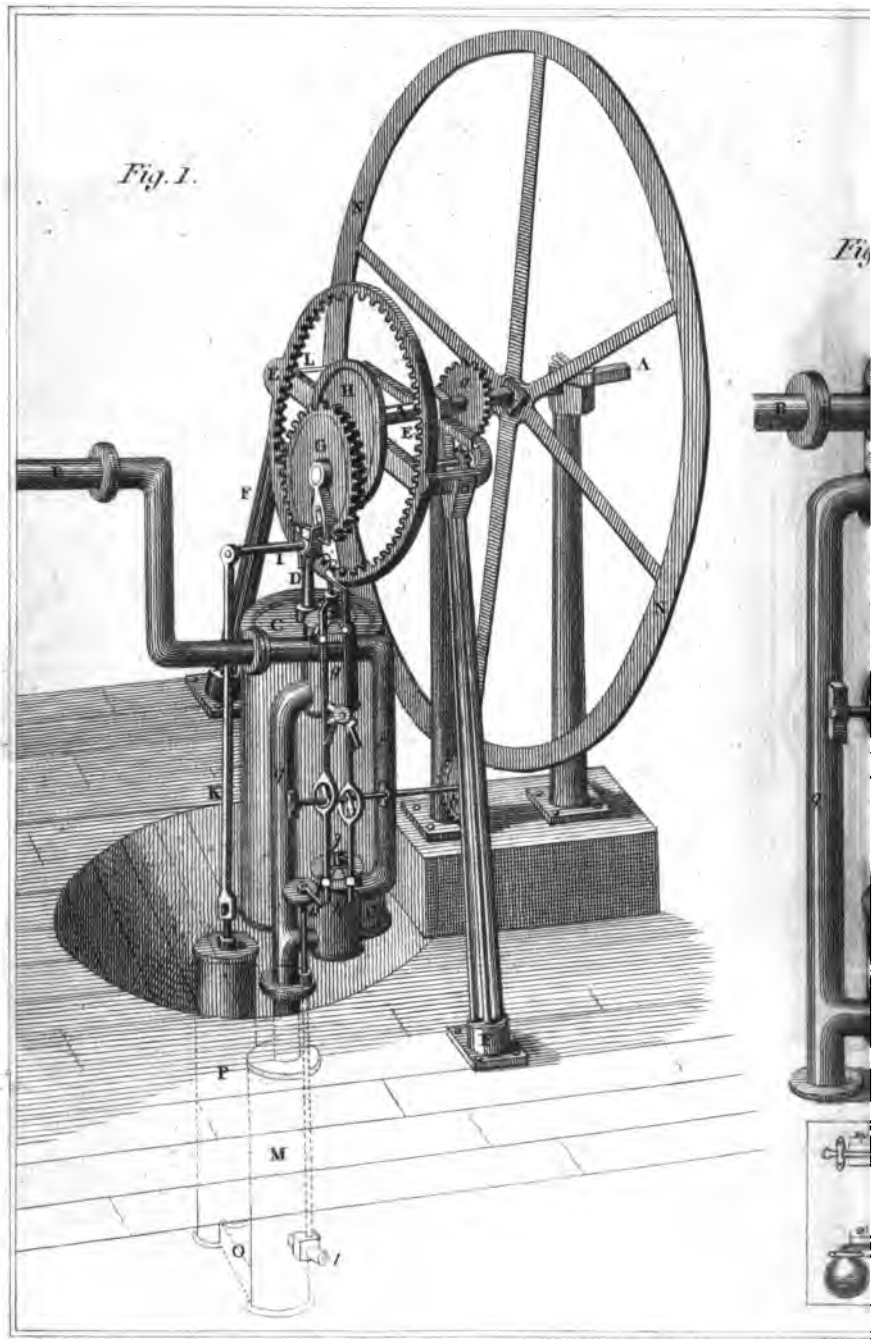


Fig. 1.
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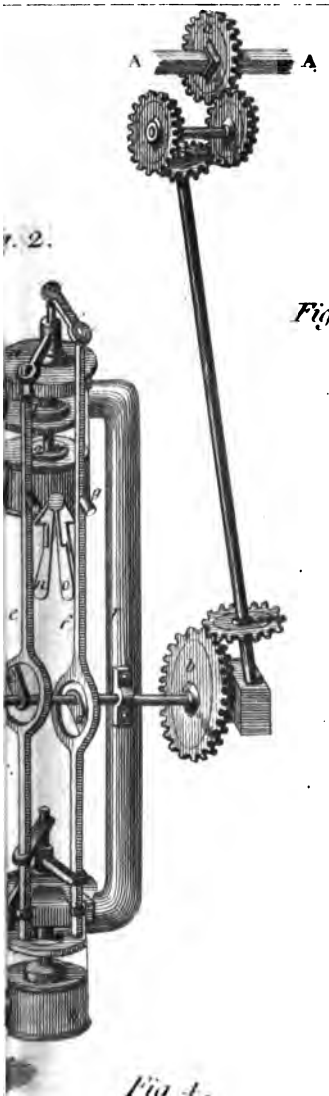


Fig. 2.

Fig. 3. N°. 1.

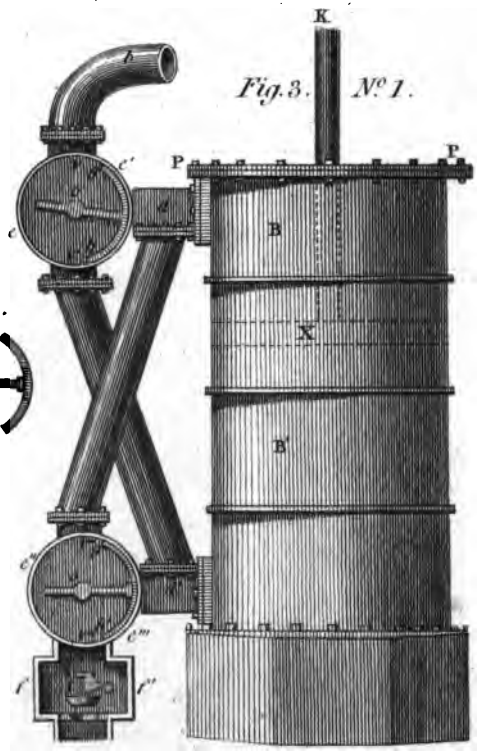
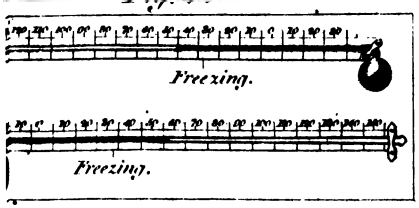


Fig. 3. N°. 2.

Fig. 4.



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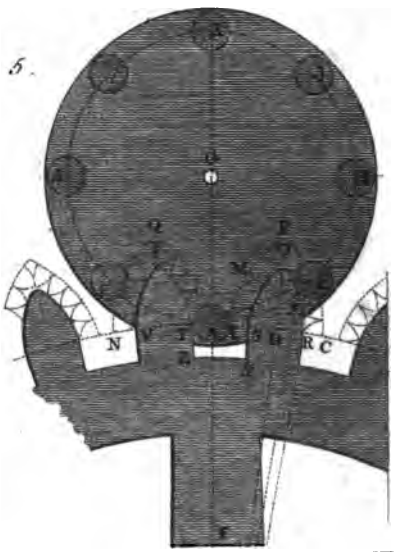

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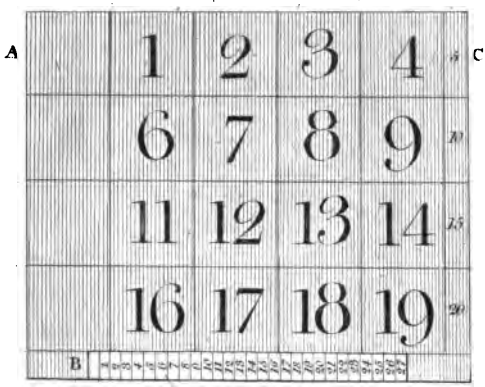


Fig. 2. Fig. 4. Fig. 5.

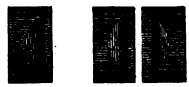
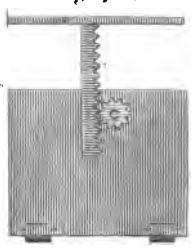


Fig. 6.

Fig. 3.

Fig. 7.



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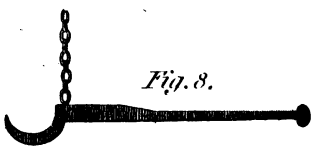

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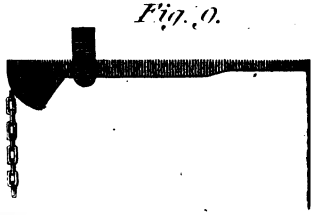

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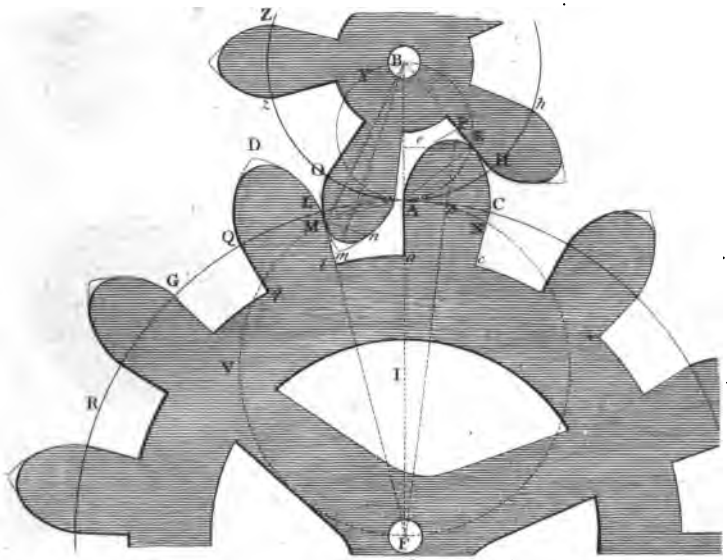

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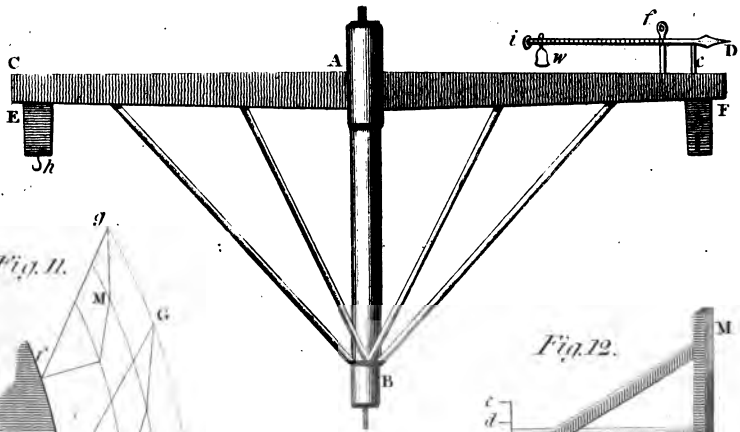

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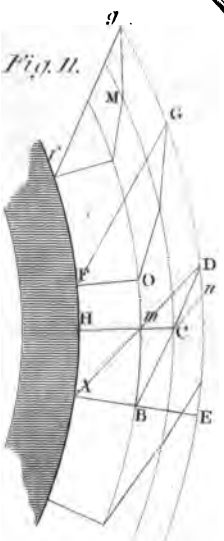

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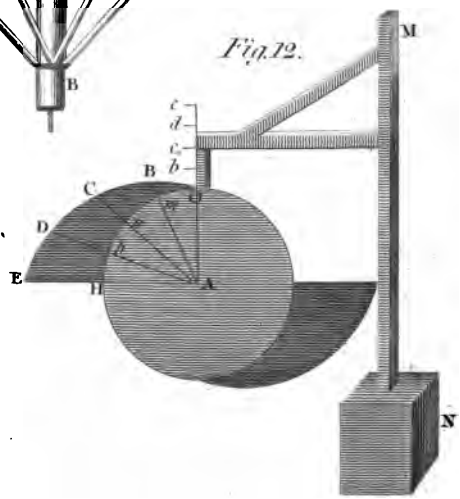

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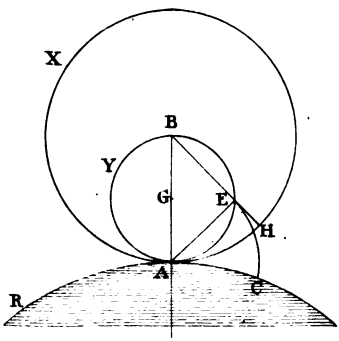

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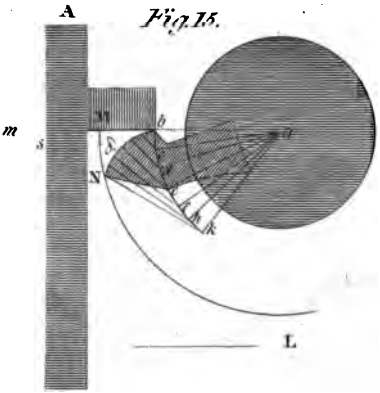
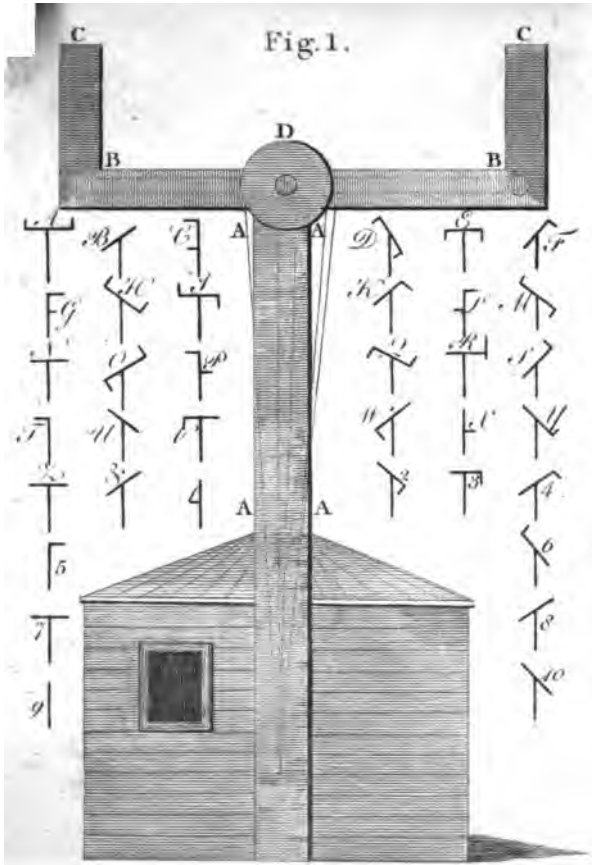


Barlow amp.

Fig. 1.



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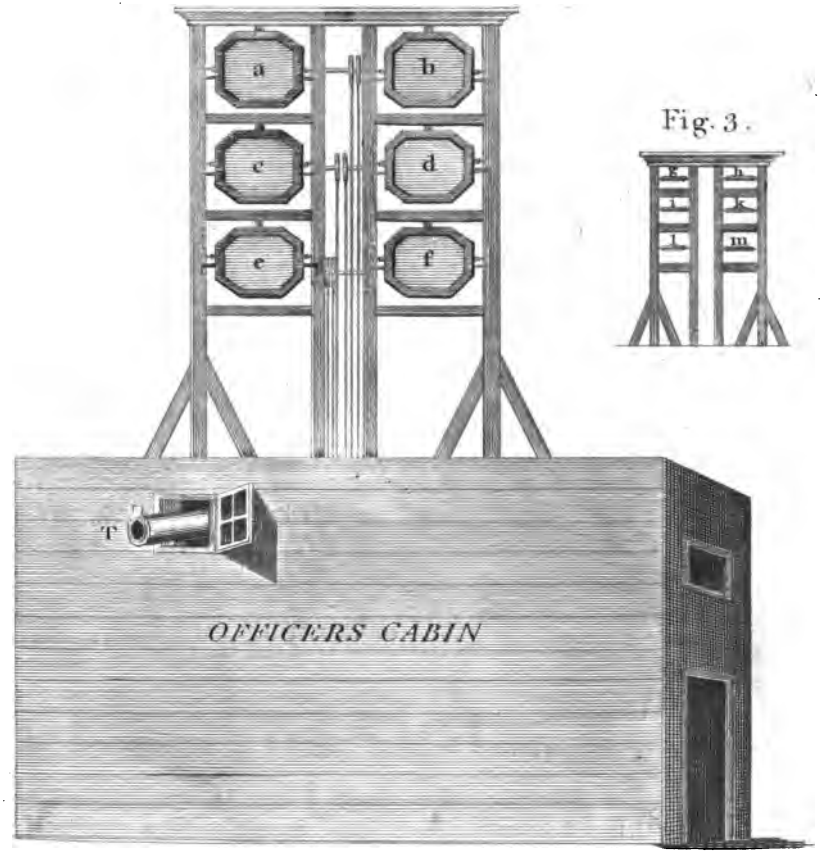


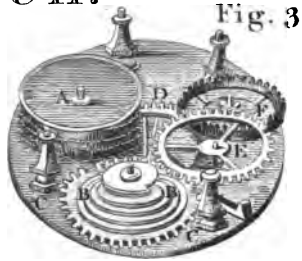
Fig. 3.

WATCH.

Fig. 1.

Fig. 2.

Fig. 3.



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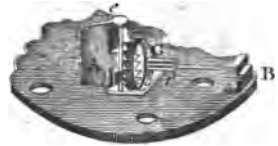

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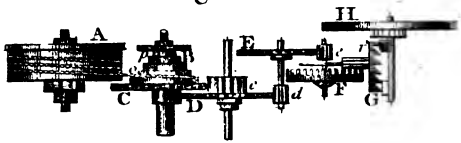


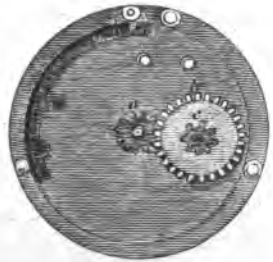
Fig. 6.

Fig. 7.

Fig. 8.

Fig. 9.

Fig. 10.



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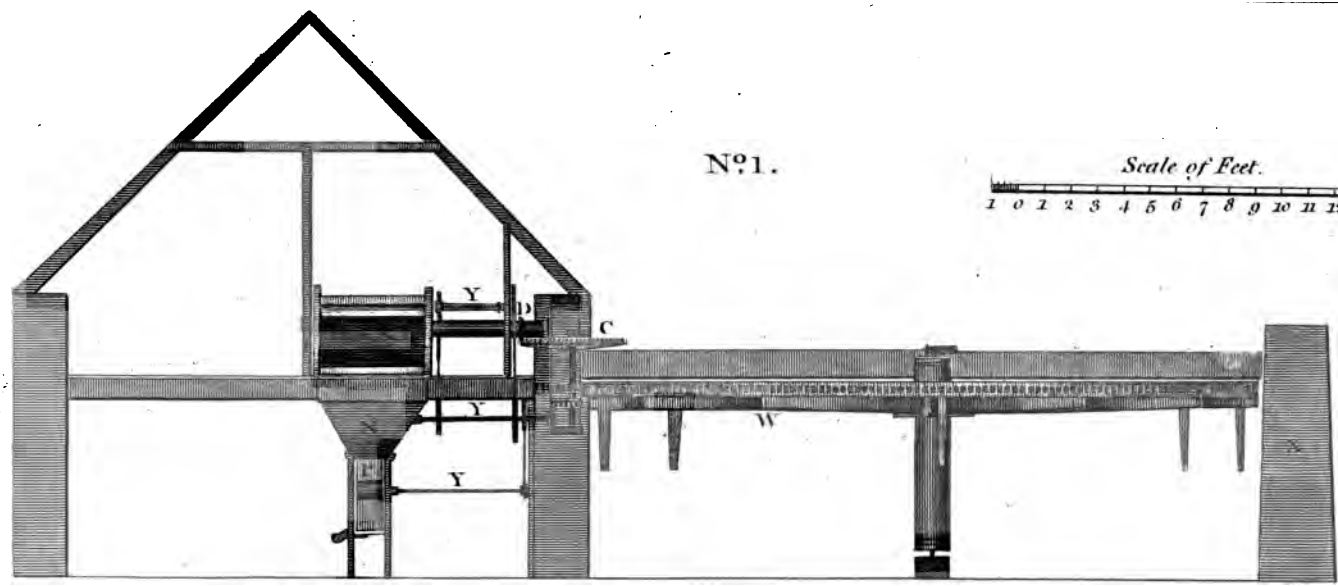
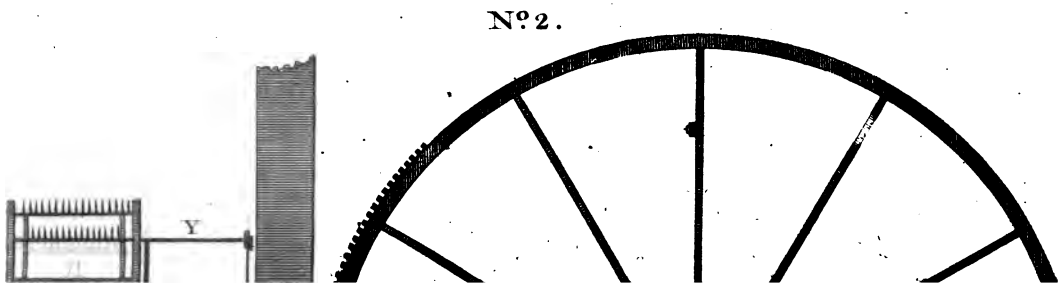
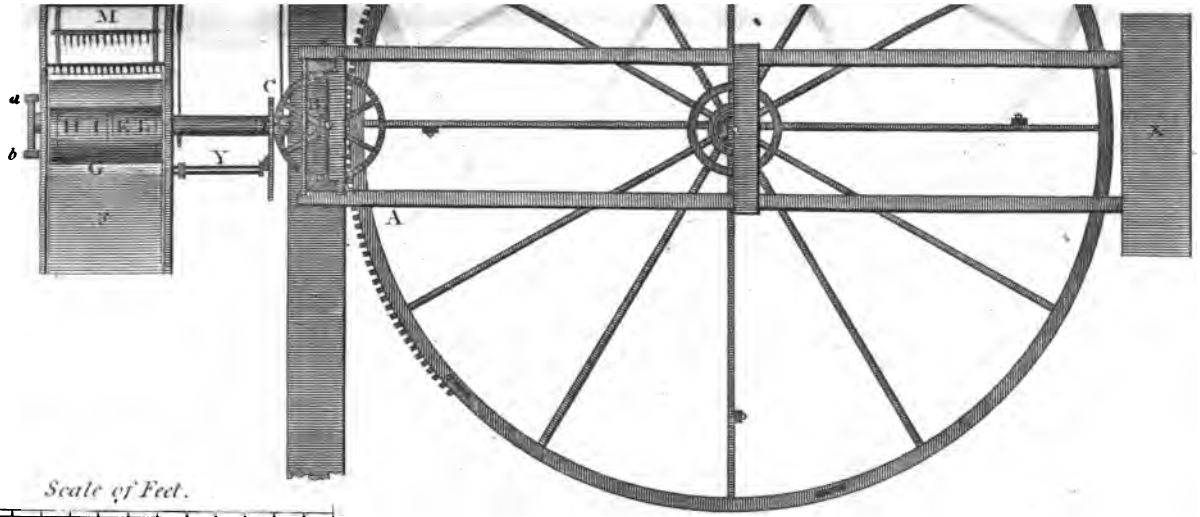

Nº1.
Scale of Feet.
1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14
Y
D
C
Y
Y
W
A

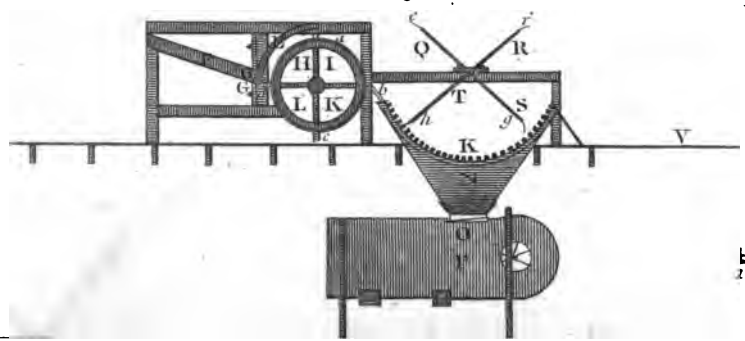

Nº2.
Y



Scale of Feet.

1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

No. 3.



Scale of Feet.

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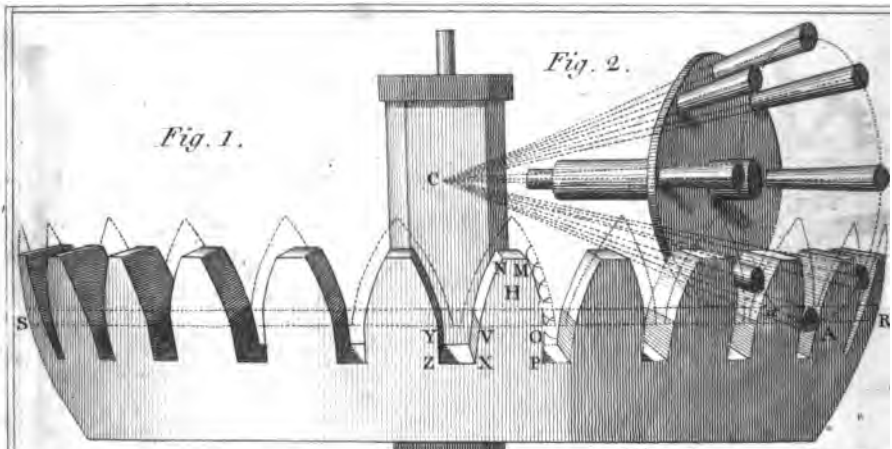
Fig. 1.
Fig. 2.
C
N
M
H
S
Y
V
O
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X
P

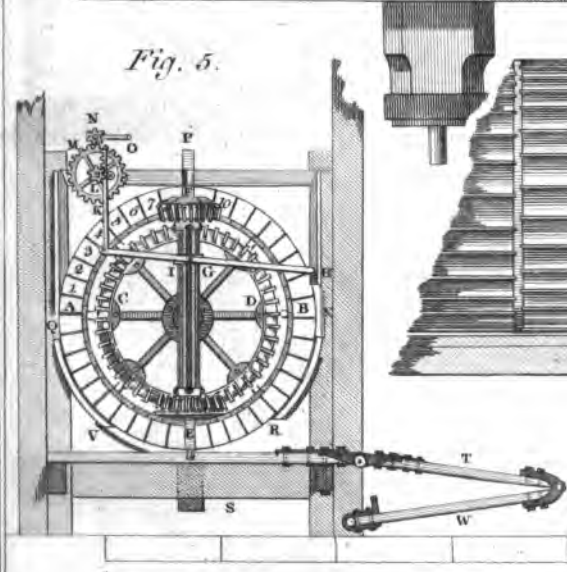
Fig. 5.
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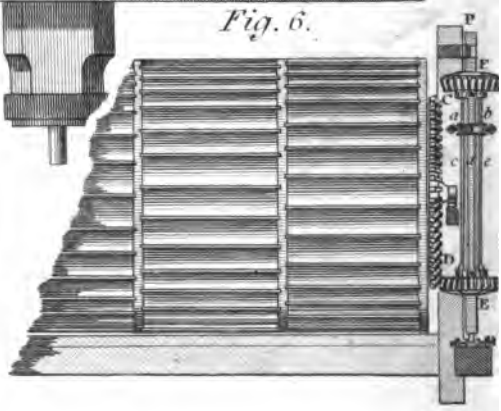
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P
a
b
c
d
e
D
E

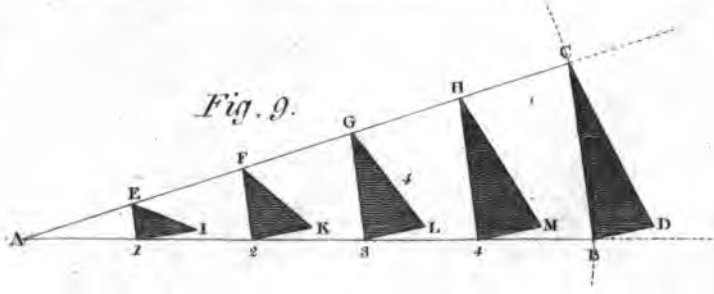
Fig. 9.
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G
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1
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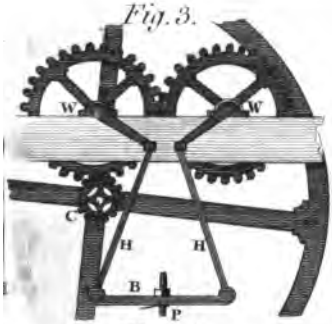
Fig. 3.



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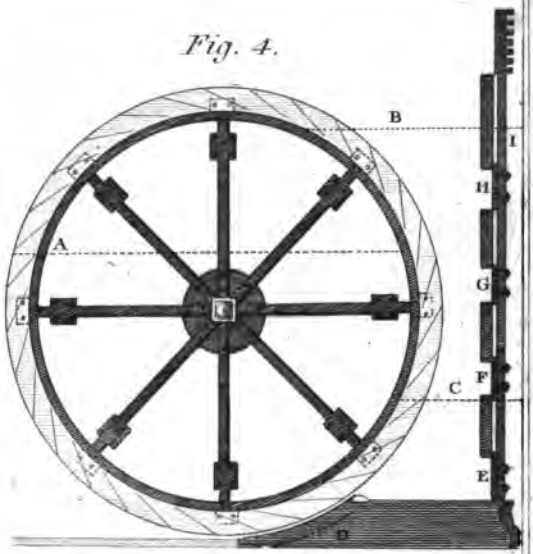

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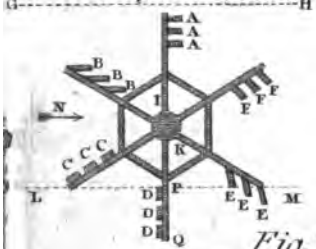

Fig. 7.

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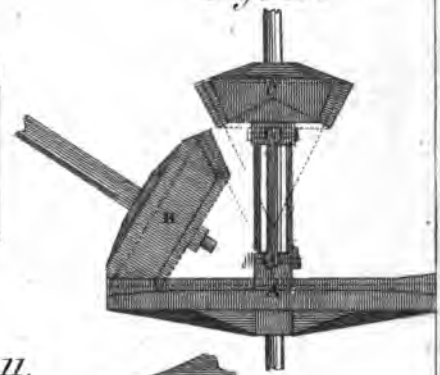

Fig. 8.

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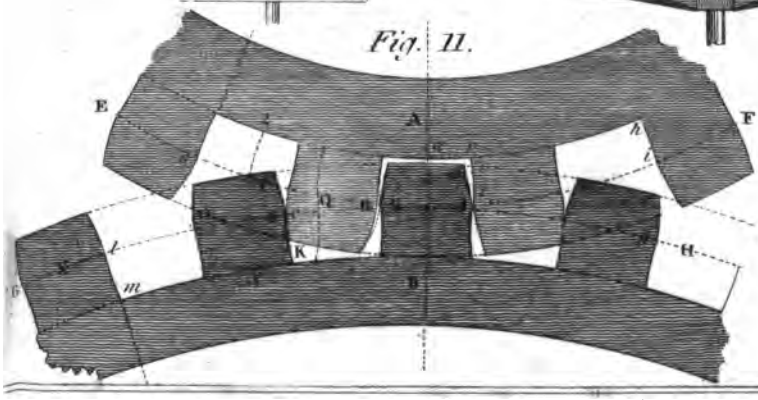


Barlow sculp.

Maudslay's Lathes and

Fig. 1.

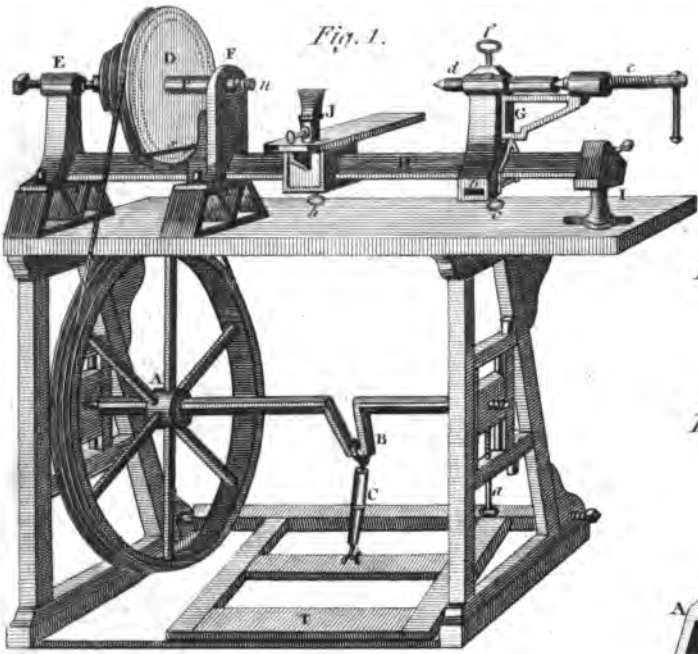
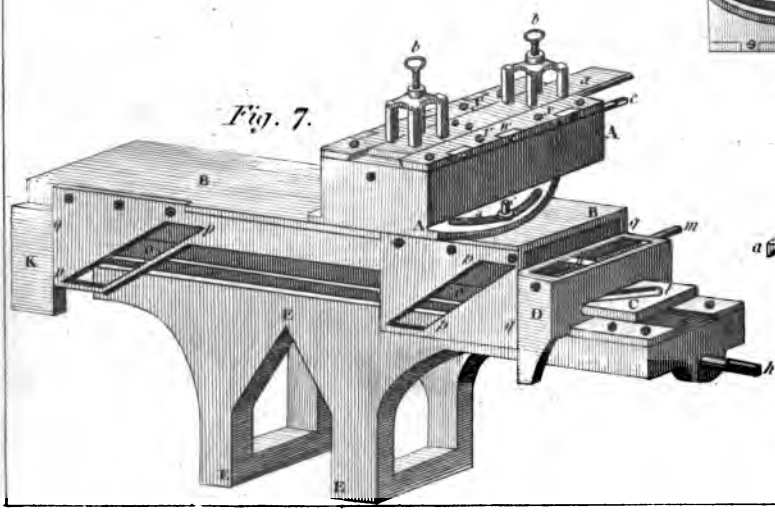


Fig. 4.

Fig. 5.

Fig. 7.



Jn. Farey jun.r del.in.

Turning Apparatus.

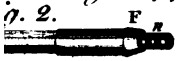
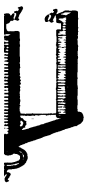
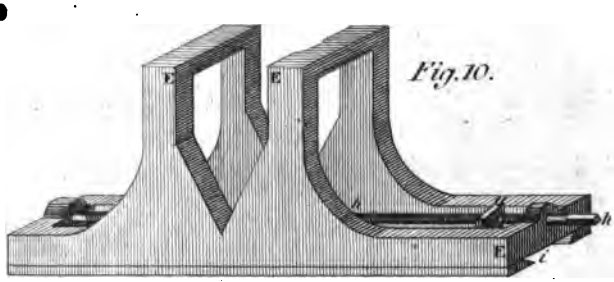


Fig. 2.

Fig. 3.





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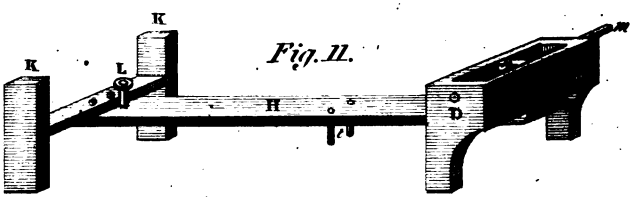

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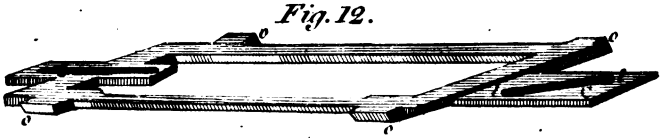

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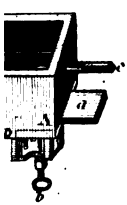

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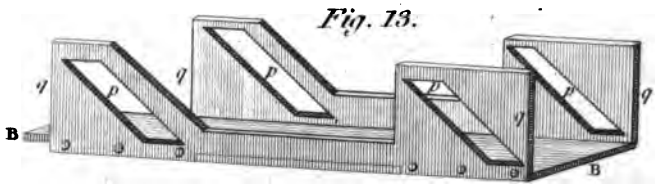
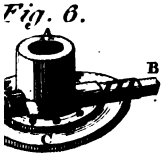


Fig. 13.

Fig. 7.



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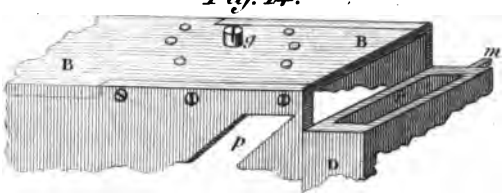

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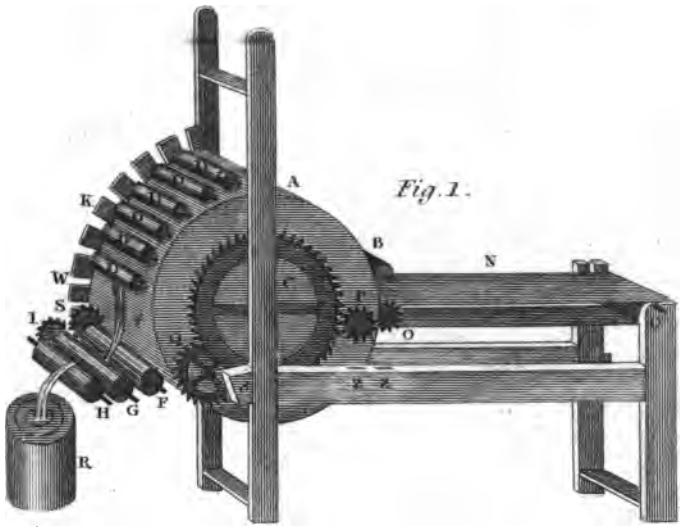

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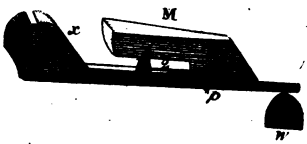

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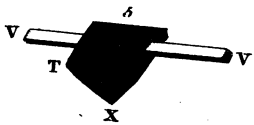

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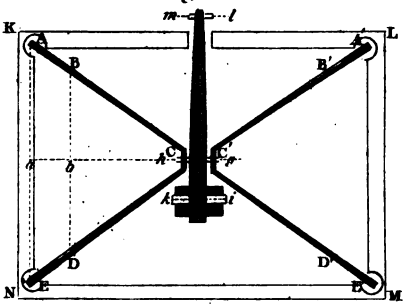
Fig. 5.



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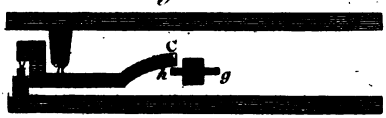

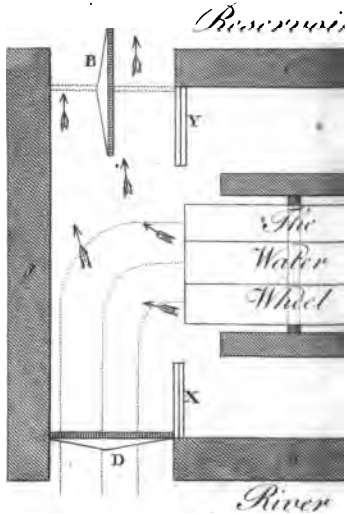

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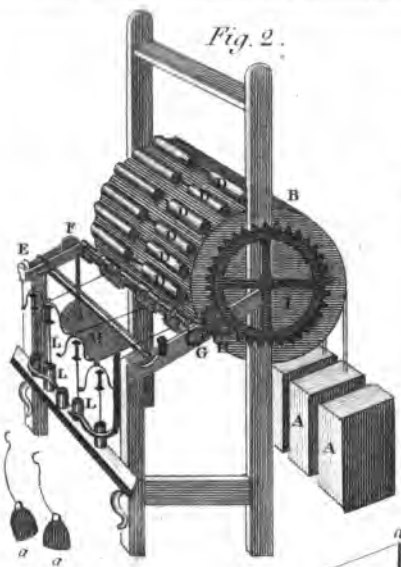
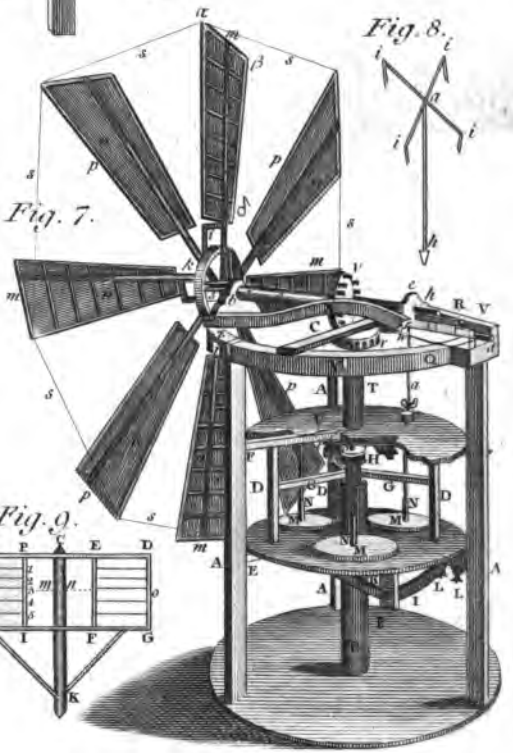
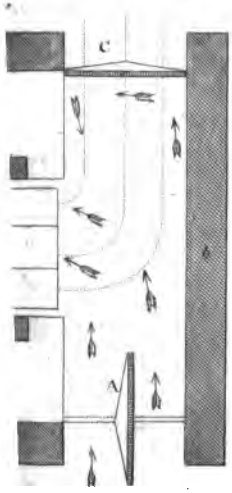


Fig. 10.

Fig. 8.

Fig. 7.





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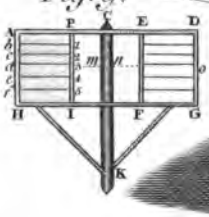
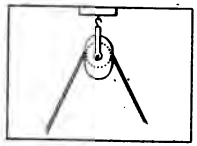
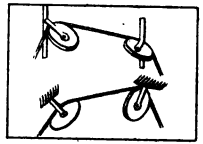
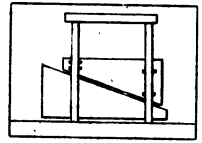
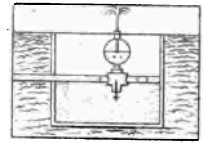
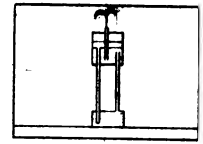


Barlow sculp

	A	B	C	D	E
1					
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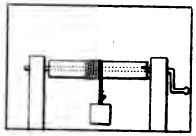
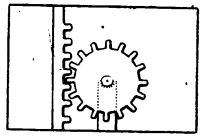
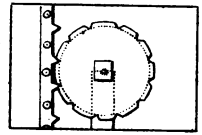
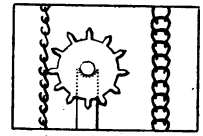
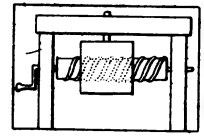
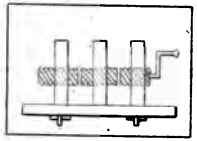
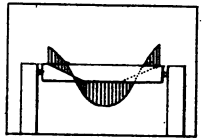
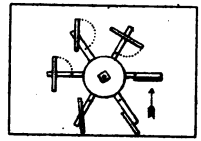
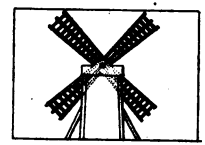
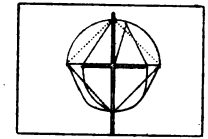
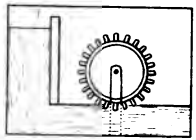
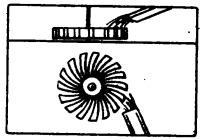
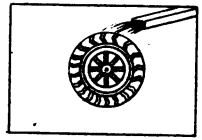
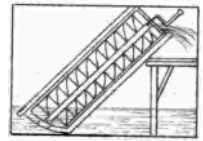
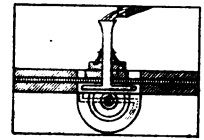
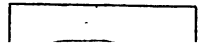
3					
3ª					
3ᵇ					
					

Mutlow Sc. Rugwell &c.

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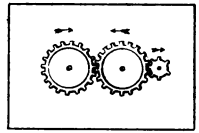
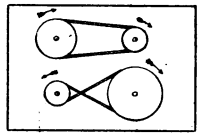
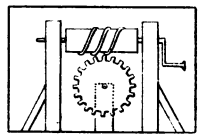
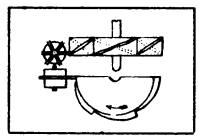
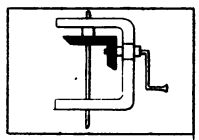
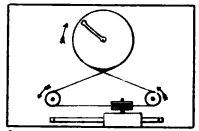
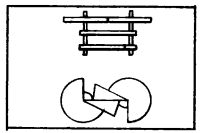
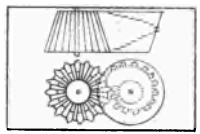
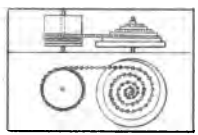
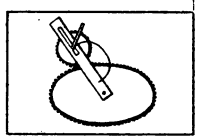
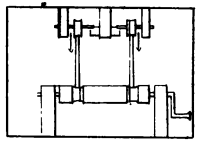
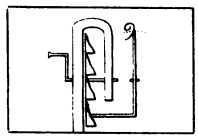
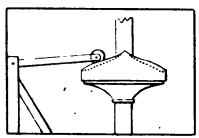
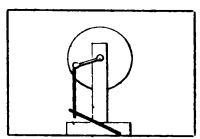
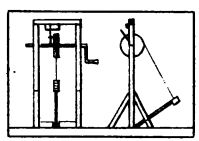
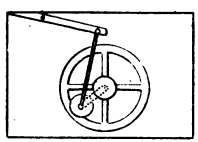
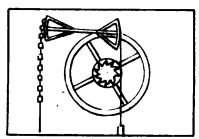
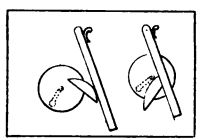
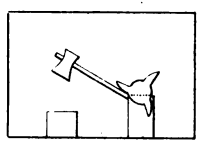
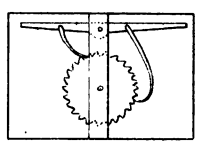
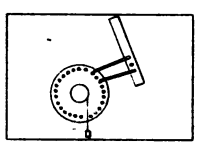
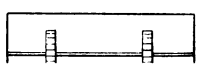
6					
6a					
6b					
7					
7a					
7b					

Mutlow Sc. Russell Co.t

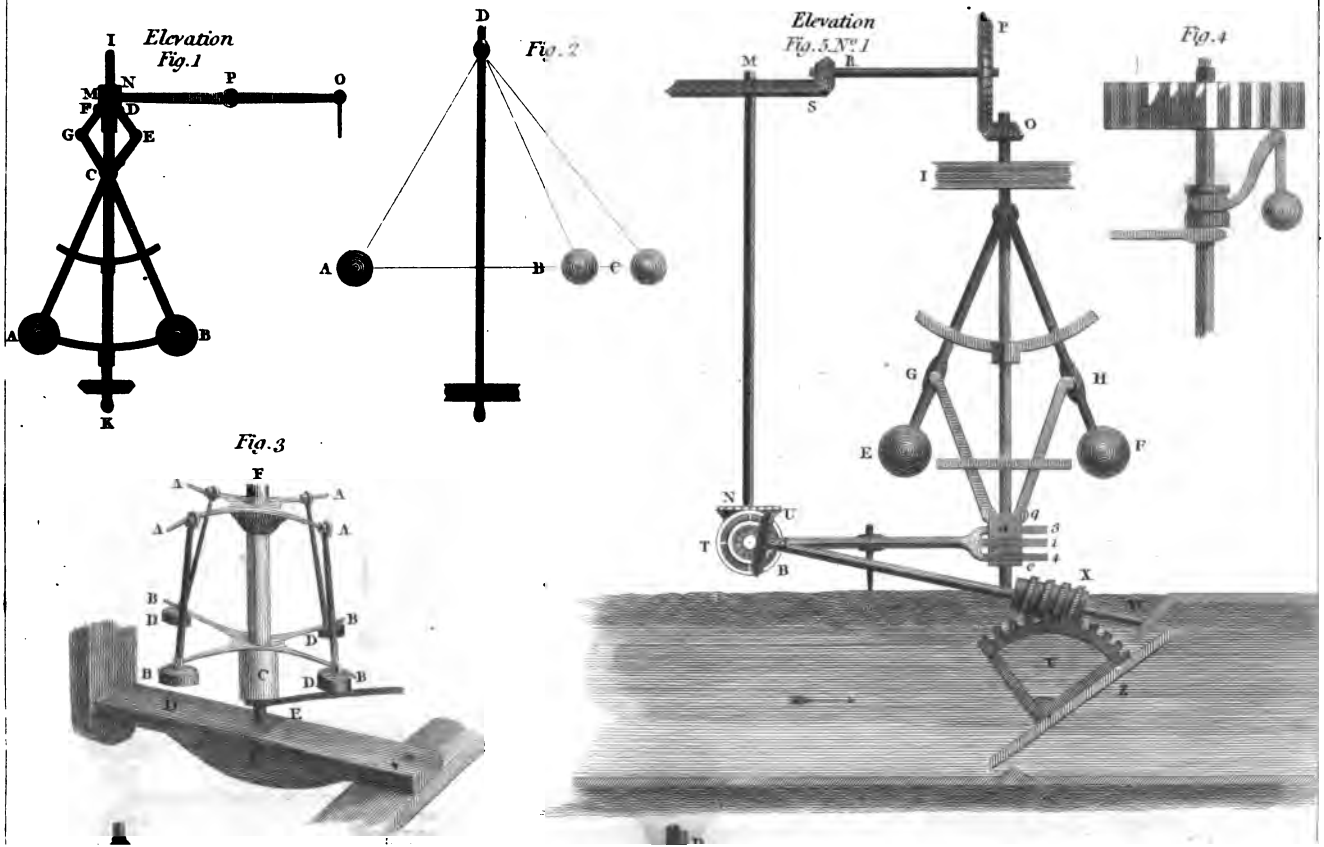

Elevation
Fig.1
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Fig. 2
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Fig.3
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Elevation
Fig. 5 N° 1
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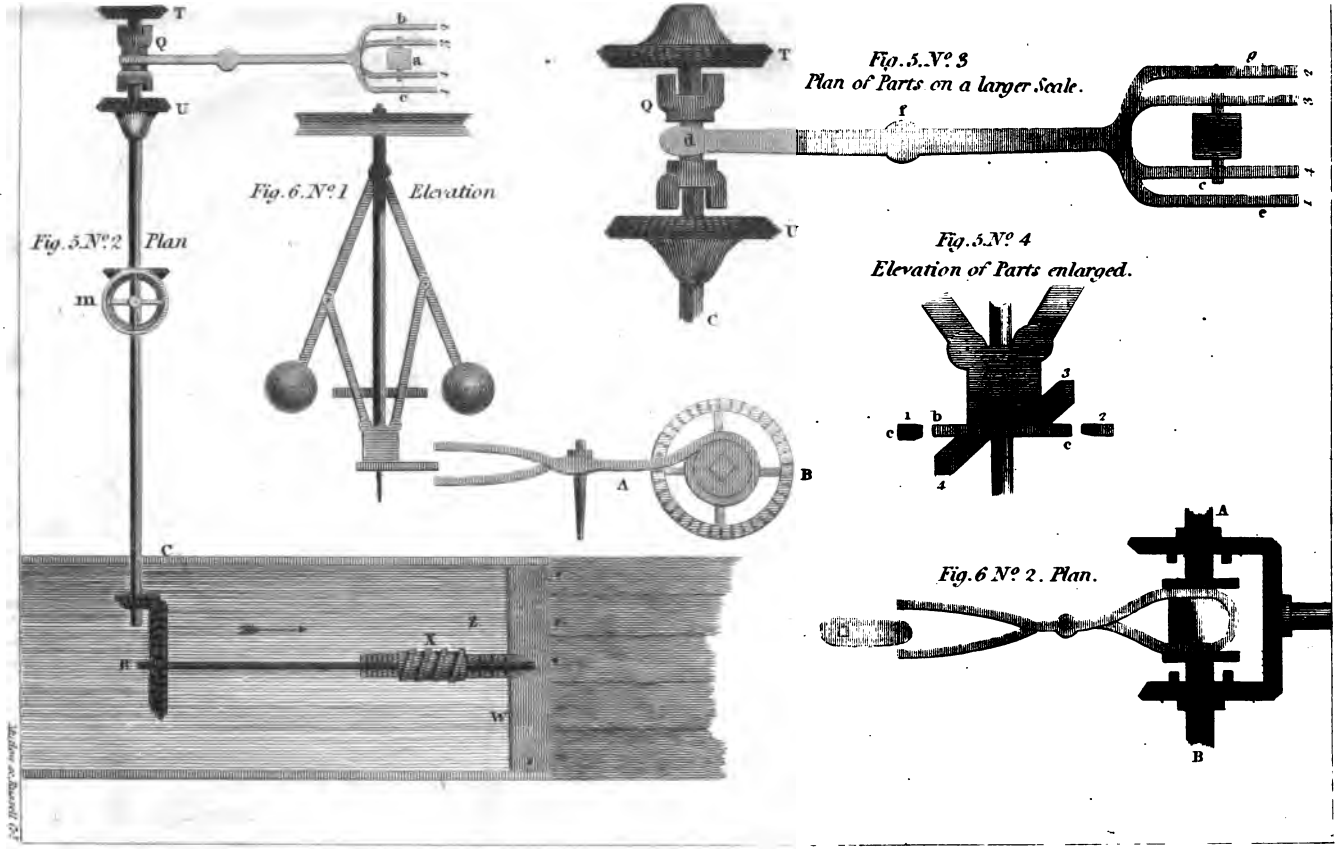
Fig.4


T
Q
U
b
a
c
Fig. 5. N° 2 Plan
m
Fig. 6. N° 1 Elevation
C
A
B
X
W
Fig. 5. N° 3
Plan of Parts on a larger Scale.
f
d
e
Fig. 5. N° 4
Elevation of Parts enlarged.
1
2
3
4
Fig. 6 N° 2. Plan.

VOL. II. PL. LI.

Blowing Machine, Royal Dock Yard, Woolwich.

Sections &c. of Cylinders.

Fig. 3.

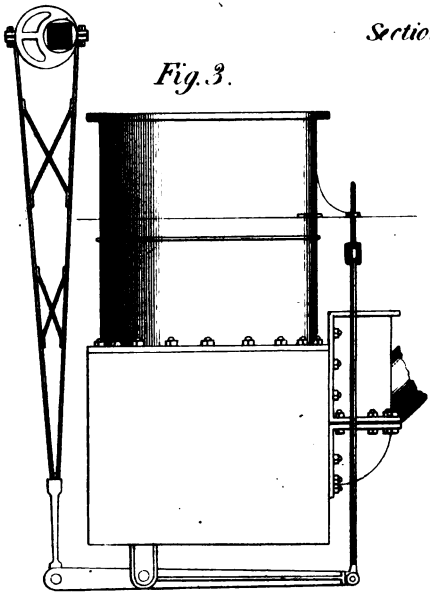


Fig. 4.

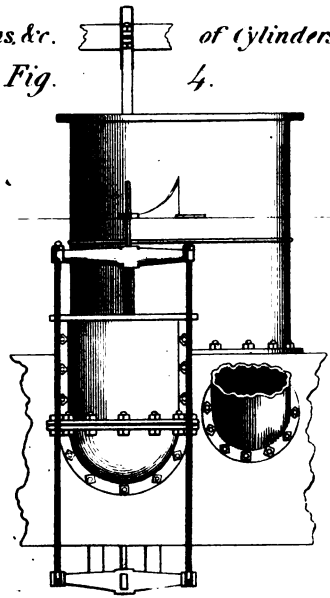
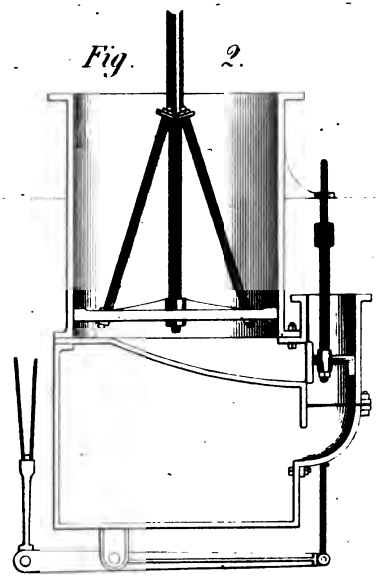


Fig. 2.

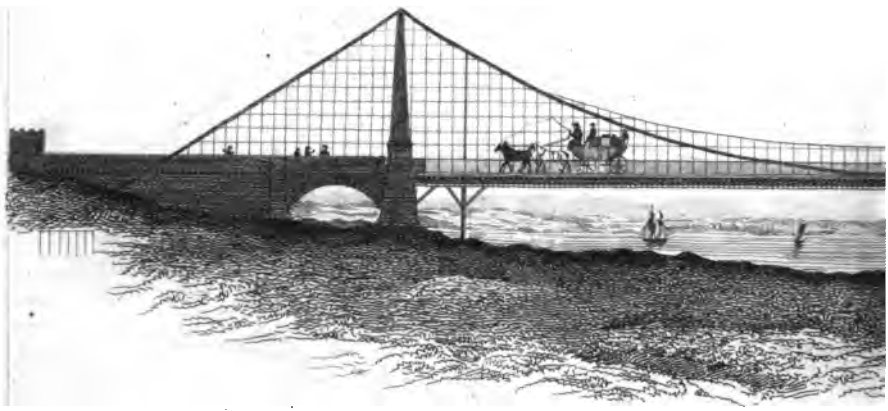


Perspective View of the Machine.

Fig. 1.

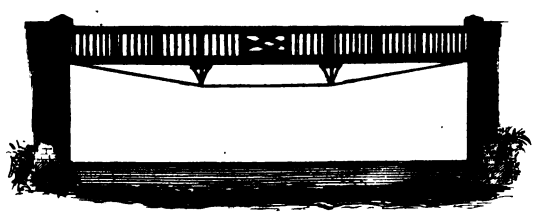
ELEV

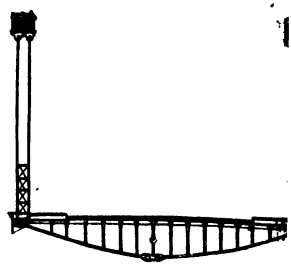
Suspension Brid



Transverse Section of Roadway of Suspending

Suspension Bridge acroſs the Kelvin near Glasgow.





TION.

e at Montrose.

View of the Drawbridge.

Rods & of Main Chains.

ENGRAVED BY R. FENNER

Harriott's Engine.

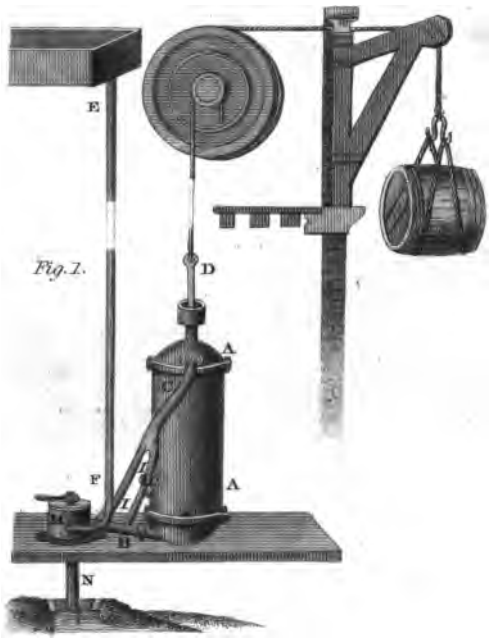
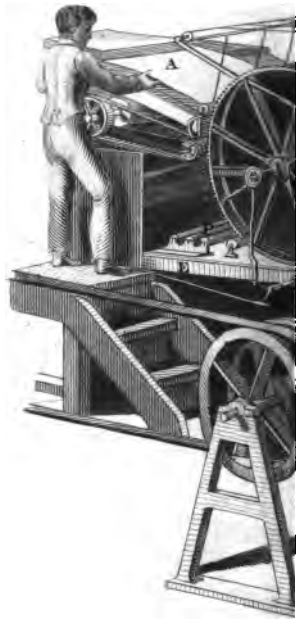


Fig. 1.



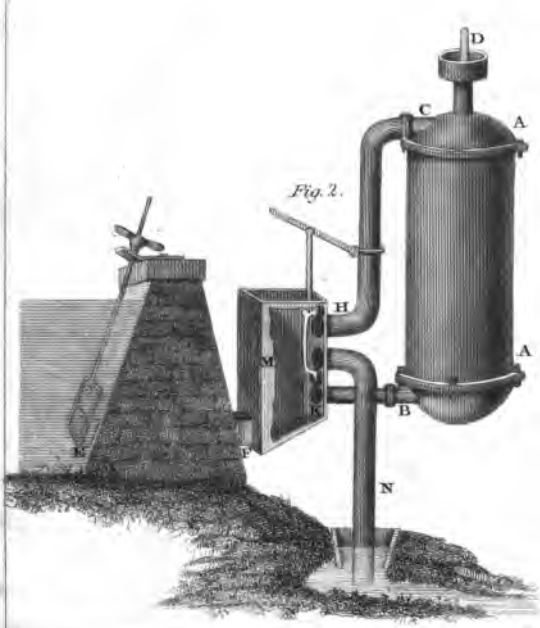


Fig. 2.

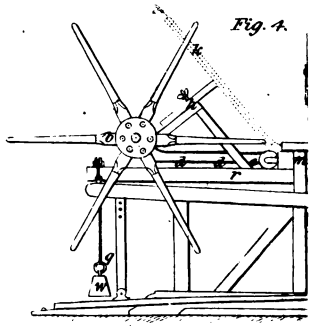


Fig. 4.

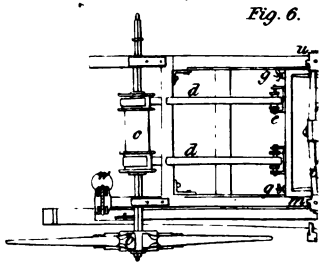


Fig. 6.

Printing Machine.

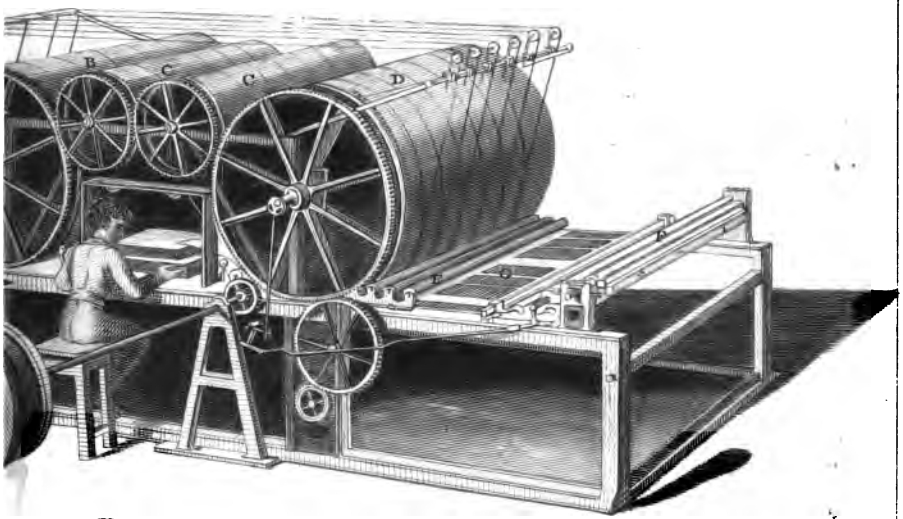


Fig. 5.

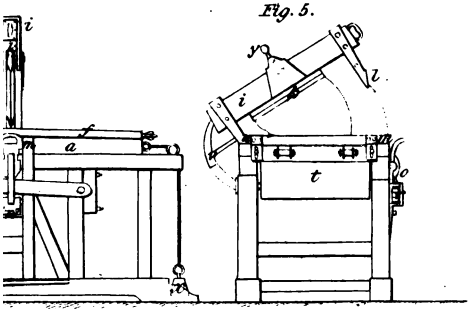


Fig. 8.

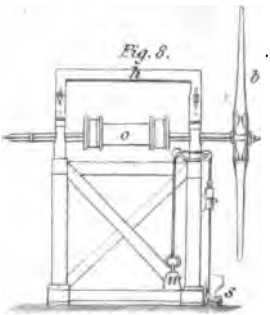
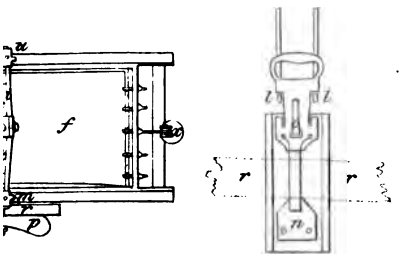


Fig. 7.



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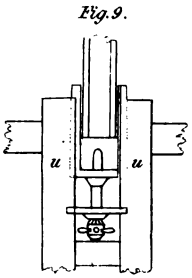

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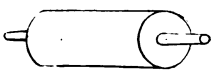


Fig. 1.

Pump

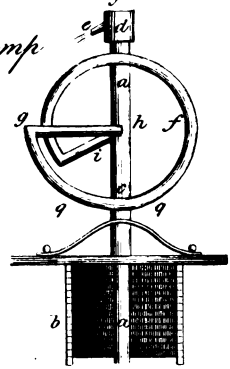


Fig. 3.

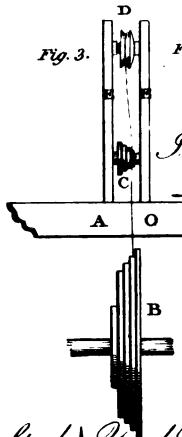
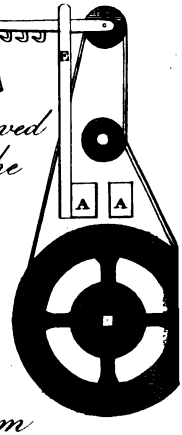


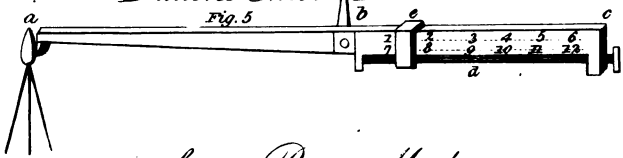
Fig. 2.

Improved Lathe



Patten's Steel Yard Beam

Fig. 5



Steam Boat Machinery

Fig. 6.

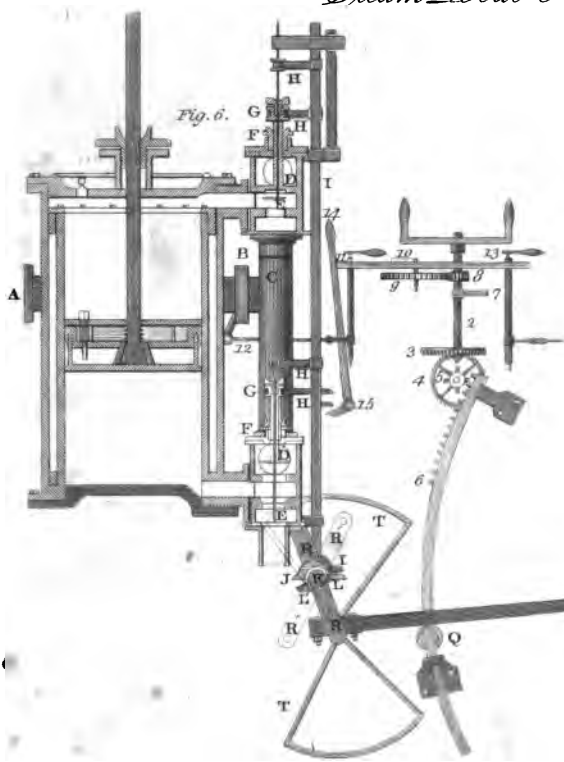


Fig. 7.

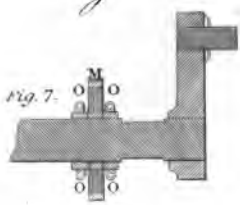
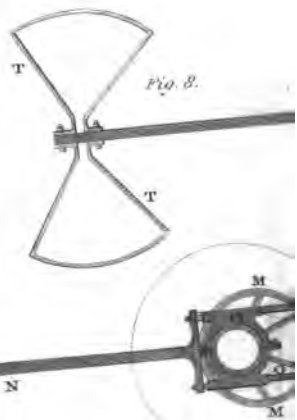


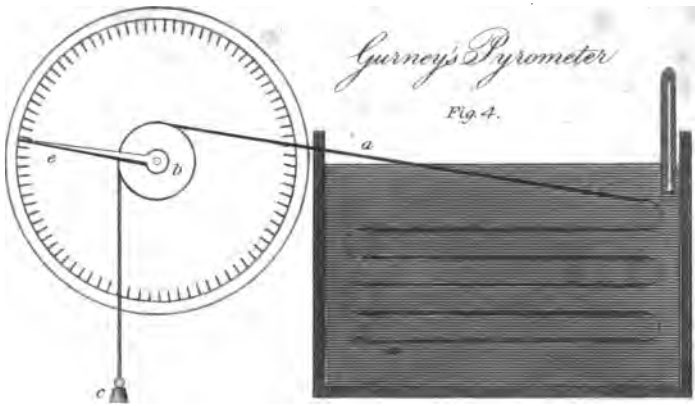
Fig. 8.



Fenner sc. Patten

Gurney's Pyrometer

Fig. 4.



Screw Engine

Fig. 9.

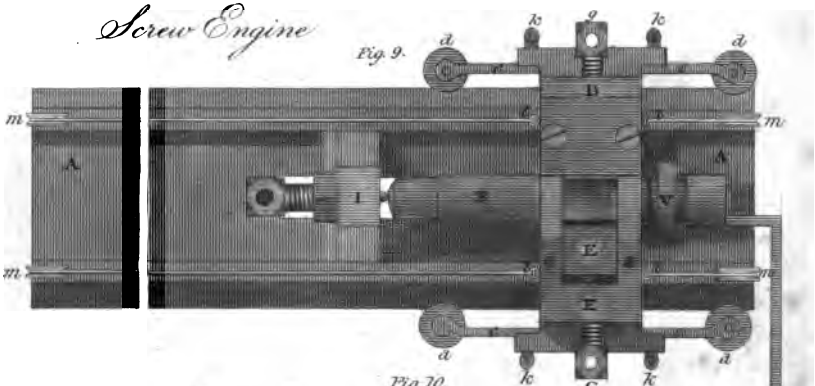


Fig. 10.

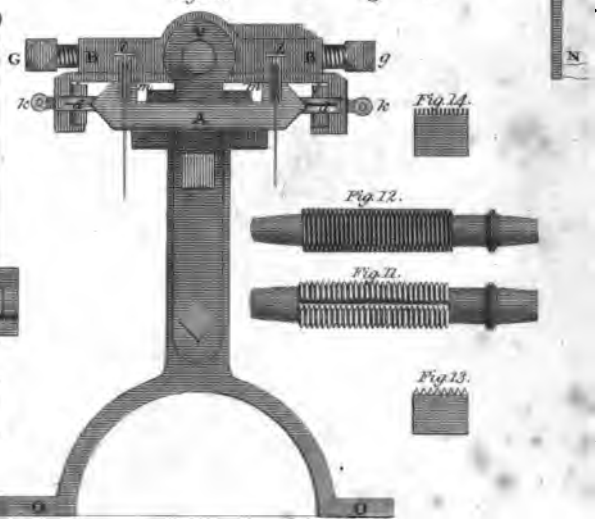


Fig. 16.

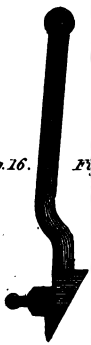


Fig. 15.

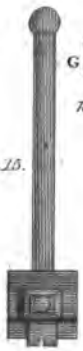


Fig. 14.

Fig. 12.

Fig. 11.

Fig. 13.

Fig. 17.

Fig. 18.

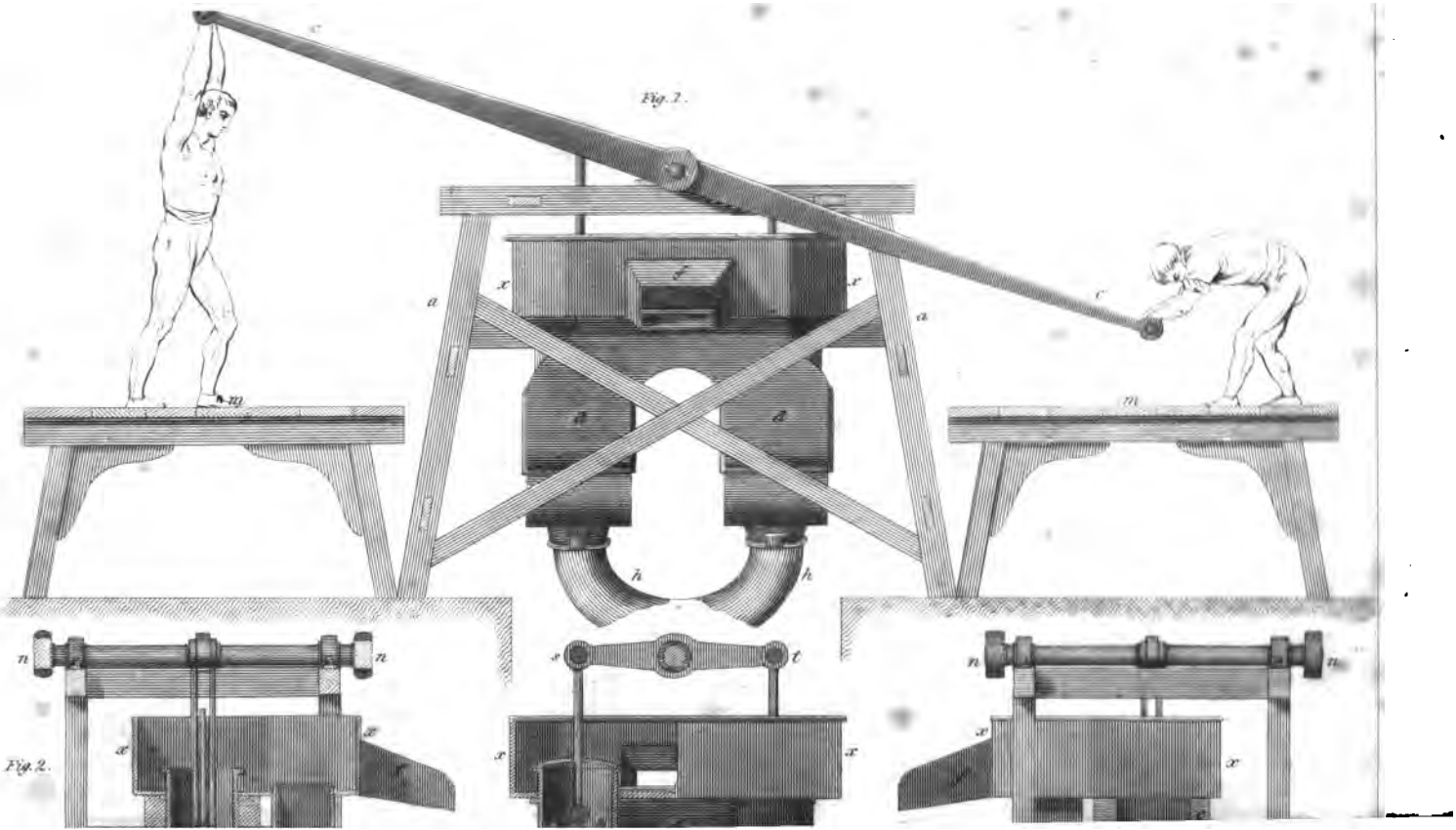


Fig. 1.
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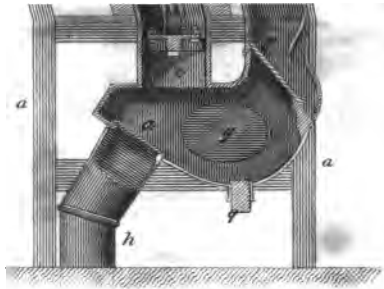

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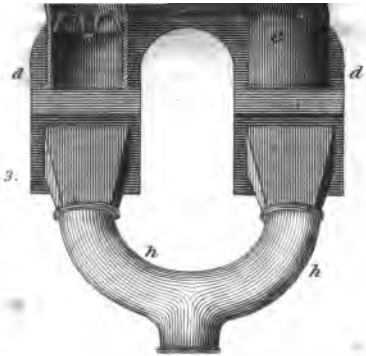

Fig. 4.

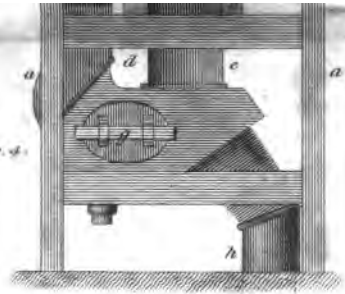
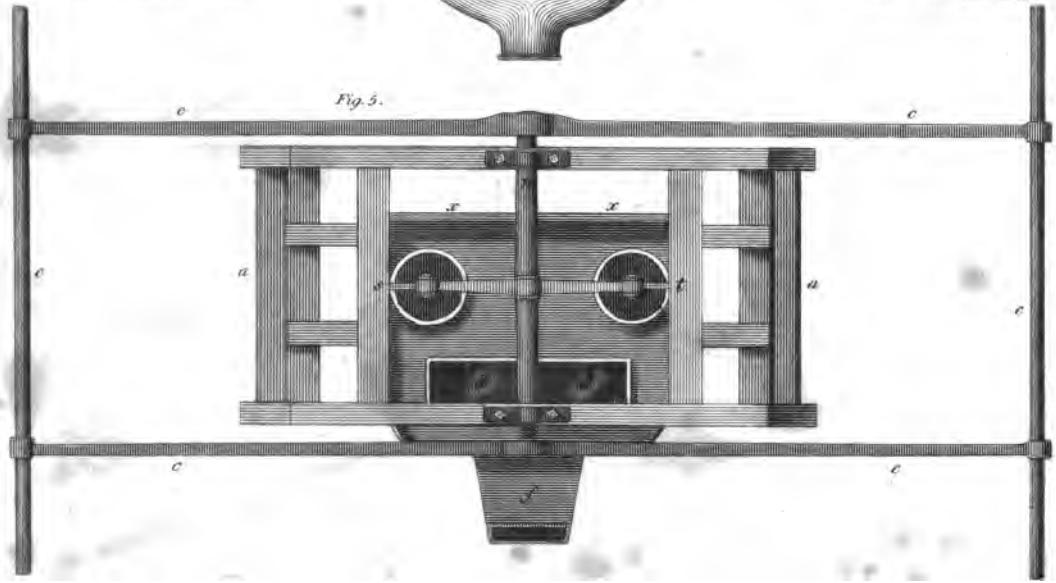
Fig. 5.